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THESIS

SOCIAL SECURITY: A PRESENT VALUE ANALYSIS OF OLD AGE SURVIVORS INSURANCE (OASI) TAXES AND BENEFITS

by

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December, 1995

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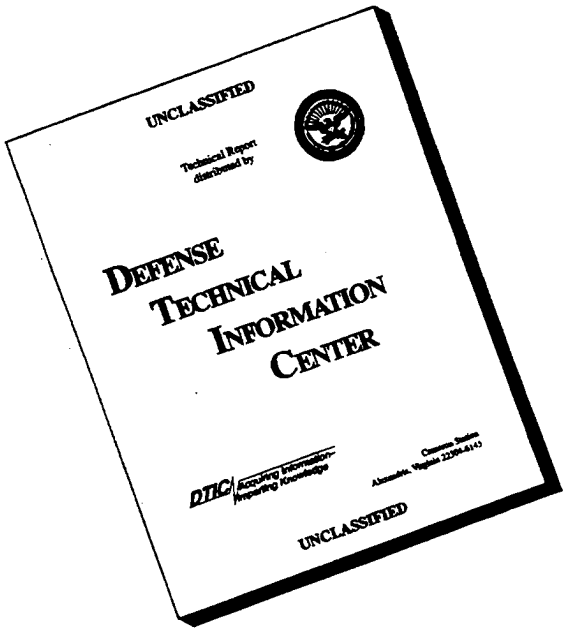

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The analysis presents clear findings showing that most people incur a net present value loss when comparing Social Security to the private sector if realistic real rates of return, on the order of four to seven percent, are used. Individuals only experience a net gain when an artificially low real rate of return of two percent, which is used by Social Security, is assumed.

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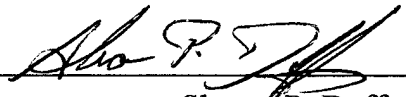
Author: 
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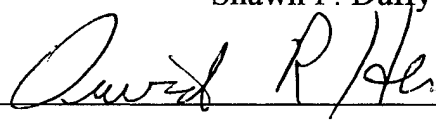
Approved by: 
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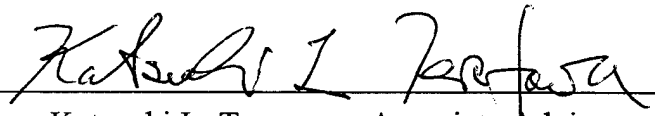
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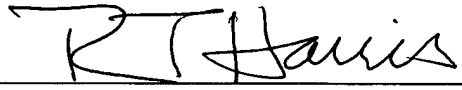
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ABSTRACT

This thesis presents a present value analysis of the Old-Age Survivors Insurance (OASI) comparing retirement benefits under Social Security with alternative private sector plans and provides a spreadsheet model for making this comparison of plans using different assumptions.

The investigation was done by collecting data from various books, Government publications, and various Government agencies to conduct a spreadsheet analysis of three different wage-earning groups, assuming various real interest rates potentially earned in the private sector. A comparison of Social Security with alternative private sector plans is important to the DoD/DoN because less constrained budgets could result if Social Security is allowed to let individuals opt for private investment.

The analysis presents clear findings showing that most people incur a net present value loss when comparing Social Security to the private sector if realistic real rates of return, on the order of four to seven percent, are used. Individuals only experience a net gain when an artificially low real rate of return of two percent, which is used by Social Security, is assumed.

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I. INTRODUCTION

In 1988, the Social Security Administration's Annual Report projected that the Social Security trust fund would reach $11.8 trillion by the year 2030 and that it would be depleted by 2048. However, by 1994, the Trustee's report projected a maximum trust fund balance of only $3 trillion by 2030, and the projected date of depletion was moved up nineteen years to 2029. This represents a loss of $8.8 trillion, or three fourths the balance, in only six years. Clearly the funding for the baby boom generation's retirement fund is shaky, at best. [Ref. 1: p. 4]

It's no secret that the Social Security system is ailing. A random poll of people aged 18 to 34 shows that 46 percent of the respondents believe there are UFOs, but only 25 percent believe Social Security will exist when they retire [Ref. 1: p. 4]. To understand why the financing for the baby boom generation's retirement and beyond is in trouble, certain flaws within the structure of Social Security must be brought to light.

This thesis looks at the Social Security system from its inception to the present, contrasting its original role of social insurance with its present diminishing circumstances. The two main areas of analysis are how the trust fund is financed and the method by which recipients are paid their benefits. In addition, a spreadsheet analysis will determine a break-even year, in which a low, a middle, and a maximum wage earner would break even with Social Security benefits, based on a two-percent rate of return on their tax investments.

The next step is to analyze how this break-even year would change for the same wage earners, using a more realistic rate of return of four to seven percent. This higher percent is based on the ability to invest in a portfolio of stocks and bonds.

A. THE SOCIAL SECURITY SYSTEM: WHY IS IT FLAWED?

Because Social Security began on the heels of the Great Depression, it was set up around the social and economic structures of that time. Despite the fact that today's economic and social structures are different, there have been no legislative changes in the basic structure of Social Security.

Peter Ferrara, author of *Social Security, The Inherent Contradiction*, also points out that the source of many of today's problems with Social Security stem from inherent conflicts in the system's objectives. He states that the Social Security program tries to serve two contradictory functions: a welfare function and an insurance function. Although this thesis focuses on a particular area of the insurance function, namely benefits, it is impossible to develop the problem without examining some key points regarding the welfare function. [Ref. 2: p. 5]

Through the benefit structure of Social Security, there are many ways of paying welfare recipients. In many cases, people receive benefits even though they have not made past tax payments into the system. The obvious result is that welfare recipients receive far more in benefits than they have paid into the system. Conversely, the benefit structure of the Social Security system includes elements that deny benefits to individuals based on lack of need, even though the benefits can be justified on the basis of past tax payments. The final

result in these cases is that individuals receive less than they have paid into the system. [Ref. 2: p. 6]

The most fatal flaw of our Social Security system is that the social security taxes paid into the system are not saved and invested through a trust fund, as in private insurance, savings, or pension plans. Instead, they are paid out immediately to current recipients on a pay-as-you-go basis, similar to that of a welfare program.

This means that the individual taxpayer, over the course of a lifetime, loses the interest that would otherwise accumulate. If the money were invested, the taxpayer would receive much greater retirement benefits than he or she would get under a mature pay-as-you-go transfer payment scheme like Social Security. It should be stated that a PAYGO system does, in fact, generate its own internal rate of return on past tax payments through naturally increasing taxes on future generations. However, this rate of return is far below the return available on investments in productive private sector alternatives.

The present PAYGO operation of the Social Security system also means that there is no trust fund to guarantee future benefit payments. Payroll taxes are collected from current workers and transferred to Social Security beneficiaries as monthly benefit checks. If payroll taxes exceed benefit payments, the Treasury Department credits the excess to Social Security as a government bond. If payroll taxes fall short of benefit payments, the Treasury cashes in enough of these government bonds to cover the deficit. In other words, trust funds are nothing more than government IOUs. [Ref. 3: p. 18]

When Social Security starts cashing in its bonds, the federal government must raise taxes, cut government spending, borrow, or do a combination of all three to redeem these bonds. Looking to the future, these specific budget maneuvers will become quite large and have significant economic and political ramifications. For example, according to the 1994 Social Security Trustee's report, bond redemptions will amount to $227 billion in 2020 and $1 trillion in 2035. [Ref. 4: p. 8]

As things now stand, the only way to guarantee future benefits is for future taxpayers to continue to bear the program's tax burden. Thus, this PAYGO financing leaves the program vulnerable to threats of bankruptcy and makes it a financially insecure means for the program's participants to acquire insurance protection.

B. HOW PRIVATIZATION WILL HELP

This thesis shows through spreadsheet analysis that allowing individuals to conduct a present value analysis with regard to their taxes and benefits, individuals will be able to see just how much they have been affected if they had been able to invest in an IRA, stocks, bonds, etc. to ensure a greater return on their investments.

A present value analysis is directly relevant to the DoD/DoN's future budget considerations. Allowing individuals to see just how well they could be doing if they were to invest in the private market under a present value analysis versus Social Security empowers them to influence to lawmakers to rethink the value of Social Security. The lawmakers could then realize that raising social security taxes or other taxes would be unnecessary. Additionally, spending cuts would not be needed to support a possible bailout

of social security. Therefore, by not raising taxes or cutting spending, the government would allow for increased defense budgets.

As a prelude to thinking about present value, policy makers need to understand the enormous effects that assumed interest rates have on the wealth of social security participants. Take for instance a quote from Carolyn Weaver in an article addressing Social Security from the book "The FORTUNE Encyclopedia of Economics" edited by David R. Henderson:

> According to a study by the Congressional Research Service, a worker with average earnings who retired at age 65 in 1940 got back the retirement portion of his and his employer's taxes, plus interest, in a mere two or three months. [Ref. 5: p. 298]

Notice that the author fails to mention the specific interest rate used in the studies. But such an interest rate is crucial in determining whether or not an individual is a loser or a gainer with respect to his benefits.

This thesis uses the traditional low 2% rate used by many analysts and then goes on to do calculations of gains and losses using higher more realistic rates of return between four and seven percent. This thesis will show that minimum wage earners under a present value analysis with varying rates of return manage to recover their taxes using the minimum assumption of 2 percent. However, even a minimum wage earner will start to lose money even under a modest assumption of 4 percent real rate of return.

Average wage earners recover their taxes on the assumption of a two percent real rate of return and real rate of interest, but the higher rate of return assumptions mean significant

losses for workers retiring in 1984 and in later years. To make matters even worse, maximum wage earners have net losses under the most modest assumption of a two percent real rate of return retiring in 1992 and never see recovery of their taxes for the higher real rates of return considered. This information is vital to all individuals who are presently paying into a system that will unlikely give them the retirement benefit that the private sector could provide.

II. COMPUTATION OF SOCIAL SECURITY TAXES AND BENEFITS

The first part of the thesis will show how the taxes that individuals pay into the Social Security Trust Fund are computed. In order to follow the calculations, the reader must understand a few assumptions.

A. ASSUMPTIONS

The following is a list of assumptions used in the calculation of Social Security taxes:

- All taxes were paid from the start of Social Security, 1937, or when an individual turned 21 years of age, whichever is later.
- Three wage groups were used in this analysis: minimum, average, and maximum wage earners.
- The Old-Age Survivors Insurance (OASI), including the employee's and employer's portions, is the only part of the Social Security tax that will be analyzed.
- All individuals will begin working at the age of 21 and will work continuously until the age of 65.

B. YEARS OF ANALYSIS

This thesis will examine the taxes paid into the Social Security system from 1979 to the present, as well as the benefits received from Social Security during the same period. Social Security amendments that took effect in 1979 changed the method by which benefits were calculated. Therefore, this thesis will focus on the years after the changes took effect.

It is important to note that the method by which taxes are paid into Social Security was not affected by the amendments.

1. Social Security Earnings for Minimum, Average and Maximum Wage Earners

Table 2.1, outlines the earnings and tax rates used to calculate the amount of taxes paid into Social Security by the three wage-earning groups analyzed in this thesis.

C. COMPUTING OLD-AGE SURVIVORS INSURANCE TAXES PAID TO SOCIAL SECURITY

Based on the assumptions described in section A above, a spreadsheet is used to calculate the taxes paid into Social Security in any given year by a minimum, average or maximum wage earner between 21 and 64 years of age. For example, an individual earning the minimum wage retires at age 65 in 1990. This individual would have started working in 1946 at age 21 and would have continued to work through 1989 at age 64. He now wants to calculate the amount of taxes he and his employer have paid into Social Security. The calculation would start in 1946 when the individual earned $832. He would then multiply this $832 by the corresponding tax rate for the employer and the employee, which are identical. The calculation looks like this:

$$(\$832*1.0\%) + (\$832*1.0\%) = \$16.64$$

This individual would have paid $16.64 into Social Security in 1946. To determine his lifetime Social Security payment, he would do this calculation for each year until the age of sixty-four (64).

TABLE 2.1

Minimum, Average and Maximum Wage Earnings and OASI Tax Rates for an Employer and Employee, 1937-1994

YEAR	MIN. WAGE EARNINGS	AVG. WAGE EARNINGS	MAX. WAGE EARNINGS	OASI EMPLOYER (TAX RATE)	OASI EMPLOYEE (TAX RATE)
1937	$520	$1,137.96	$3,000	1.000%	1.000%
1938	$520	$1,053.54	$3,000	1.000%	1.000%
1939	$624	$1,142.36	$3,000	1.000%	1.000%
1940	$624	$1,195.00	$3,000	1.000%	1.000%
1941	$624	$1,276.04	$3,000	1.000%	1.000%
1942	$624	$1,454.28	$3,000	1.000%	1.000%
1943	$624	$1,713.52	$3,000	1.000%	1.000%
1944	$624	$1,936.32	$3,000	1.000%	1.000%
1945	$832	$2,021.40	$3,000	1.000%	1.000%
1946	$832	$1,891.76	$3,000	1.000%	1.000%
1947	$832	$2,175.32	$3,000	1.000%	1.000%
1948	$832	$2,361.64	$3,000	1.000%	1.000%
1949	$832	$2,483.20	$3,000	1.000%	1.000%
1950	$1,499	$2,543.96	$3,000	1.500%	1.500%
1951	$1,560	$2,799.16	$3,600	1.500%	1.500%
1952	$1,560	$2,973.32	$3,600	1.500%	1.500%
1953	$1,560	$3,139.44	$3,600	1.500%	1.500%
1954	$1,560	$3,155.64	$3,600	2.000%	2.000%
1955	$1,560	$3,301.44	$4,200	2.000%	2.000%
1956	$1,993	$3,532.36	$4,200	2.000%	2.000%
1957	$2,080	$3,641.72	$4,200	2.000%	2.000%
1958	$2,080	$3,673.80	$4,200	2.000%	2.000%
1959	$2,080	$3,855.80	$4,800	2.250%	2.250%
1960	$2,080	$4,007.12	$4,800	2.750%	2.750%
1961	$2,184	$4,086.76	$4,800	2.750%	2.750%
1962	$2,392	$4,291.40	$4,800	2.875%	2.875%
1963	$2,461	$4,396.64	$4,800	3.375%	3.375%
1964	$2,600	$4,576.32	$4,800	3.375%	3.375%
1965	$2,600	$4,658.72	$4,800	3.375%	3.375%
1966	$2,600	$4,938.36	$6,600	3.500%	3.500%
1967	$2,886	$5,213.44	$6,600	3.550%	3.550%
1968	$3,293	$5,571.76	$7,800	3.325%	3.325%
1969	$3,328	$5,893.76	$7,800	3.725%	3.725%
1970	$3,328	$6,186.24	$7,800	3.650%	3.650%
1971	$3,328	$6,497.08	$7,800	4.050%	4.050%
1972	$3,328	$7,133.80	$9,000	4.050%	4.050%
1973	$3,328	$7,580.16	$10,800	4.300%	4.300%
1974	$3,883	$8,030.76	$13,200	4.375%	4.375%
1975	$4,368	$8,630.92	$14,100	4.375%	4.375%
1976	$4,784	$9,226.48	$15,300	4.375%	4.375%
1977	$4,784	$9,779.44	$16,500	4.375%	4.375%
1978	$5,512	$10,556.03	$17,700	4.275%	4.275%
1979	$6,032	$11,479.46	$22,900	4.330%	4.330%
1980	$6,448	$12,513.46	$25,900	4.520%	4.520%
1981	$6,968	$13,773.10	$29,700	4.700%	4.700%
1982	$6,968	$14,531.34	$32,400	4.575%	4.575%
1983	$6,968	$15,239.24	$35,700	4.775%	4.775%
1984	$6,968	$16,135.07	$37,800	4.926%	4.926%
1985	$6,968	$16,822.51	$39,600	5.200%	5.200%
1986	$6,968	$17,321.82	$42,000	5.200%	5.200%
1987	$6,968	$18,426.51	$43,800	5.200%	5.200%
1988	$6,968	$19,334.04	$45,000	5.530%	5.530%
1989	$6,968	$20,099.55	$48,000	5.300%	5.300%
1990	$7,670	$21,027.98	$51,300	5.600%	5.600%
1991	$8,606	$21,780.69	$53,400	5.600%	5.600%
1992	$8,840	$22,935.42	$55,500	5.600%	5.600%
1993	$8,840	$23,132.67	$57,600	5.600%	5.600%
1994	$8,840	$23,737.57	$60,600	5.260%	5.260%

Source: Social Security Administration, Congressional Research Service, 1994.

D. CONSUMER PRICE INDEX ADJUSTMENT

After calculating the amount of taxes paid into Social Security, an adjustment must be made to bring past dollar values up to present day values. For instance, the above individual who paid $16.64 in Social Security taxes in 1946 needs to know how much that amount is worth in 1990, when he retires. Using the consumer price indexes for major expenditure classes, the individual can do this calculation easily. He would take the $16.64 paid in 1946 and multiply it by the index amount for 1989, or 124.0. Because the individual is going so far back to calculate the amount, two overlapping tables that cover the entire period are needed. Appendices A and B are the two tables that were used for purposes of this thesis. Appendix A is the Consumer price indexes for major expenditure classes from 1935-1960 and Appendix B is Consumer price indexes for major classes from 1950-1994. After multiplying $16.64 by 124.0, the individual then divides by a cross-over amount on both lists. For this thesis, 1950 is the crossover year and the amount is 24.0. The last two steps are to multiply by 102.8, the corresponding amount for 1950 on the second list, and to divide by 83.4, the CPI for 1946, the base year of this calculation. The calculation is simplified below:

Amount		**CPI for 1989**		**CPI for 1950(1994 value)**
$16.64	*	124.0	/	24.1

CPI for 1950(old value)		**CPI for 1946**	=	**Taxes paid in 1990 $**
* 102.8	/	83.4		$105.53

The result of this calculation is $105.53. In other words, $16.64 of taxes in 1946 are worth $105.53 in 1990 dollars. This calculation is easily done on a spreadsheet for all years from the time an individual turns 21 until retirement at the age of 65.

E. CALCULATING SOCIAL SECURITY BENEFITS

The calculation of benefits has never been based directly on one's payroll tax contribution, but, rather, on earnings upon which the taxes are paid. The process by which benefit payments are related to past earnings has changed frequently over the course of Social Security's history, but the basic idea has remained roughly the same. First, some measure of a worker's average monthly earnings subject to Social Security taxes over a number of years is calculated. Then, a "progressive" benefit formula is applied to this earnings measure to determine the basic monthly benefit amount. The current benefit calculation process, outlined in the 1977 amendments to the Social Security Act, took effect in 1979.

1. Calculating Average Indexed Monthly Earnings

The first step is to compile all earnings from the time the individual turned 22 or from 1951, whichever is later, until the individual turned 62. For instance, if an individual turned 62 in 1981, which we will call the benchmark year, then 1951 would be later than the age at which the individual turned 21. If an individual turned 62 in 1992, then the individual turned 22 in 1952; since that date is later than 1951, he would start his compilation in 1952.

The next step is to find out how many calendar years will go into the calculation. First, take the benchmark year or the year at which an individual turned 62, and then subtract

1951 or the year in which an individual turned 22, whichever is later. After reaching that number, subtract five, which accounts for an individual's five lowest-earning years up to, but not including, age 62. For example, an individual who had a benchmark year of 1982 would subtract 1951 to get an answer of 31 years. Subtracting five from this value leaves 26, which is the number of years of earnings that will go into the calculation of AIME, excluding the year in which he turned 62. An individual who would have a benchmark year of 1992 would subtract 1952 to get an answer of 40. Subtracting five from this value leaves 35 years of earnings with which to calculate AIME.

The next step in calculating the AIME is to determine the "monthly divisor," which involves nothing more than multiplying the number of years of earnings by 12. The individual with a benchmark year of 1982 would have a monthly divisor of 312, and the individual with a benchmark year of 1992 would have a monthly divisor of 420. [Ref. 6: p. 256]

2. Indexing Wages

An individual must now make an inflation adjustment for all earnings subject to Social Security tax in the years up to and including the year in which he would turn 60. This is done by multiplying an indexing factor to the wage an individual receives. This indexing factor is calculated by taking the average national wage in the year an individual turns 60 and dividing that by the average national wage for the year to be indexed. For administrative

purposes, wages earned at age 60 or later are left at their nominal values in the indexing process. This process can be seen on spreadsheets in the Appendices.

The final calculation to determine an individual's AIME is to take the indexed earnings and sum them up using the number of highest-earning years and then dividing by the calculated monthly divisor. This will give an AIME. [Ref. 6: p. 257]

3. Calculating Primary Insurance Amount (PIA)

The primary insurance amount (PIA) is the basic monthly benefit paid to someone who has stopped working and has begun to collect benefits at the normal retirement age of 65, as assumed in this thesis. To calculate PIA, an individual first needs a "bendpoint table." These bendpoints are the PIA's formula wage indexing, if you will. They are determined for each cohort when he reaches age 62, and remain fixed thereafter. Bendpoints are increased for each successive cohort to keep pace with average wage growth in the economy. Bendpoints for purposes of this thesis can be found in Appendix C. For example, take an average wage earner with a benchmark year of 1982. This individual's calculation for his AIME came to $1200. He would go to the bendpoint table and look up the bendpoints for 1982. Here, the individual would find the method to calculate his PIA. He would take $207.00 plus 32% of the excess of $230 dollars, which would be $1200-$230=$970. The entire calculation would look like this:

$970 x 32%=$310.40 + $207.00=$517.40

This $517.40 would be the PIA an individual would receive at age 62. However, for the

purposes of this thesis, we are assuming an individual will retire at age 65. This would entail multiplying by 1+ Cost-Of-Living-Allowance (COLA) for each year leading up to age 65. This Cost-Of-Living Allowance is an indexing procedure that adjusts automatically for changes in wage and price levels. These COLA percentages can be found in Appendix D.

In the above instance, the individual would multiply $517.40 by 1.074, or 1+.074, which is the COLA rate for 1982. This value would become $555.68. The individual would repeat this calculation for 1983 and 1984, which would give him the PIA amount he would receive in January 1985 when he would turn 65. Finally, for the purposes of this thesis, multiplying that amount by 12 yielded a yearly benefit amount in order to do present value calculations. [Ref. 7]

III. COMPARISON OF SOCIAL SECURITY TAXES AND BENEFITS IN PRESENT VALUE TERMS

In order to do a present value analysis, an interest rate must be assumed. What is a reasonable interest rate to assume? Social Security analysts tend to use two percent, based on the long-term real rate of return on bonds. However, this is far below what taxpayers could earn if they instead invested their Social Security taxes in a broad portfolio of stocks or mutual funds over the same period.

In his book, *Stocks for the Long Run*, Jeremy Siegel provides an historical look at the real rate of return for both stocks and bonds over the past two centuries. The average real, or after-inflation, compound return on stocks has been 6.7 percent per year. The same average real rate of return for long-term bonds has varied greatly during the past two centuries. The real rate of return for bonds has been as high as 4.5 to five percent during the early years of the survey, 1816-1876, and as low as 1.7 percent during the last 70 years. [Ref. 8: p. 12]

A range of percentages will be used for the purposes of this thesis. Two, four, and five percent will cover the conservative investor, whose portfolio is heavily weighted with bonds. Additionally, two percent will represent the real rate of return that tax payers can expect to earn on taxes paid into the Social Security trust fund. The higher percentages of six and seven percent will be used for the higher-risk investor, whose portfolio is concentrated in stocks. To conduct a present value analysis of taxes paid versus benefits

received, the reader needs to understand the calculations involved to arrive at these values for both taxes and benefits.

A. CALCULATING TAXES PAID IN PRESENT VALUE DOLLARS

On the spreadsheets for taxes paid, see Appendices F thru U, the column labeled "taxes paid present value dollars" shows the amount an individual's taxes paid would be worth upon retirement at age 65 in a given year between 1982-1994.

The calculation is fairly simple. First, let's say a minimum wage earner turned 65 in 1994. This individual wants to know how much money he has paid into Social Security from the age of 21, using various real rates of return. For instance, in 1951, when the individual turned 21, he would have earned $266.76 in CPI-adjusted dollars. To calculate how much this money would be worth in present value dollars at a real rate of return of two percent, this formula applies:

Wage earned for given year * (1+ real rate of return) ^(Benchmark year-year wages earned)

This would translate into numbers thusly:

$266.76 * (1+.02)^(1994-1951)

This calculation would be done for every successive year from 1951 through 1994. The great advantage to this calculation is that an individual can see various present values of taxes paid had he been able to use real rates of return higher than the two percent put forth by Social Security analysts.

B. CALCULATING BENEFITS IN PRESENT VALUE DOLLARS

An individual who wishes to calculate his benefits in present value terms can do so very easily by using a spreadsheet to do the math. First, he would take the PIA amount determined by the benefit formula after accounting for inflation to the age of 65. As discussed previously, the benefit formula arrives at a PIA amount based on retirement at 62. Since this thesis assumes that an individual will continue to work until the age of 65, the spreadsheets show three COLA calculations that make the PIA amount consistent with what an individual would receive at age 65.

After taking the PIA amount, which is a monthly rate, the next step is to multiply by 12 to get an annual amount. This amount would be plugged into a Present Value Formula within the spreadsheet In this case, an individual would plug in the PIA amount, a number of periods which, according to the assumptions of this thesis, equal the remaining life expectancy for a male after reaching the age of 65 in a given year, and a real rate of interest. For example, a minimum wage earner retiring at age 65 in 1994 would have received an annual amount of **$6472.06**. Using a life expectancy of 15.2 years and a real interest rate of two percent, the spreadsheet would return a value of **$84,148.12**. This is the amount of money that individual would expect to receive in benefits if he were to meet his life expectancy.

C. COMPARISON OF PRESENT VALUE TAXES AND BENEFITS

The crux of this thesis is the following present value comparison of taxes paid and benefits paid, based on the data gathered. Put simply, a minimum wage earner who retired at age 65 can look at the amount of taxes paid into Social Security and the value of that money, using various real rates of return, from the two percent of Social Security and bonds through the seven percent earned in a portfolio of stocks. The individual can then compare the amount of taxes paid into the trust fund with the amount of benefits he would receive in present value terms. An important note: for purposes of this analysis, all individuals will be assumed to live until their life expectancy.

1. Minimum-Wage Earner - Various Interest Rates

As Table 3.1 shows, a minimum wage earner at various interest rates has a wide ranging net present value gain or loss. An individual, assuming a 2% interest rate (real rate of return), finds that in net present value terms, he will always get back more in benefits than paid in taxes.

An individual, assuming a 4 percent interest rate, finds the first break-even point at a retirement age of 65 following 1990. Even more alarming is the break-even point for an individual assuming a very low interest rate of 5 percent finds that in a present value analysis, an individual retiring after year 1983 finds negative net present values from 1984 on. Any minimum wage earner assuming an interest rate higher than 6 percent finds nothing but negative net present values from the inception of Social Security changes to present day. A minimum wage earner, assuming a 6 percent real interest rate or higher for the amount of

taxes he would have paid into Social Security for his entire lifetime, would never receive dollar one more in benefits than paid in taxes even if the individual lived to his life

TABLE 3.1

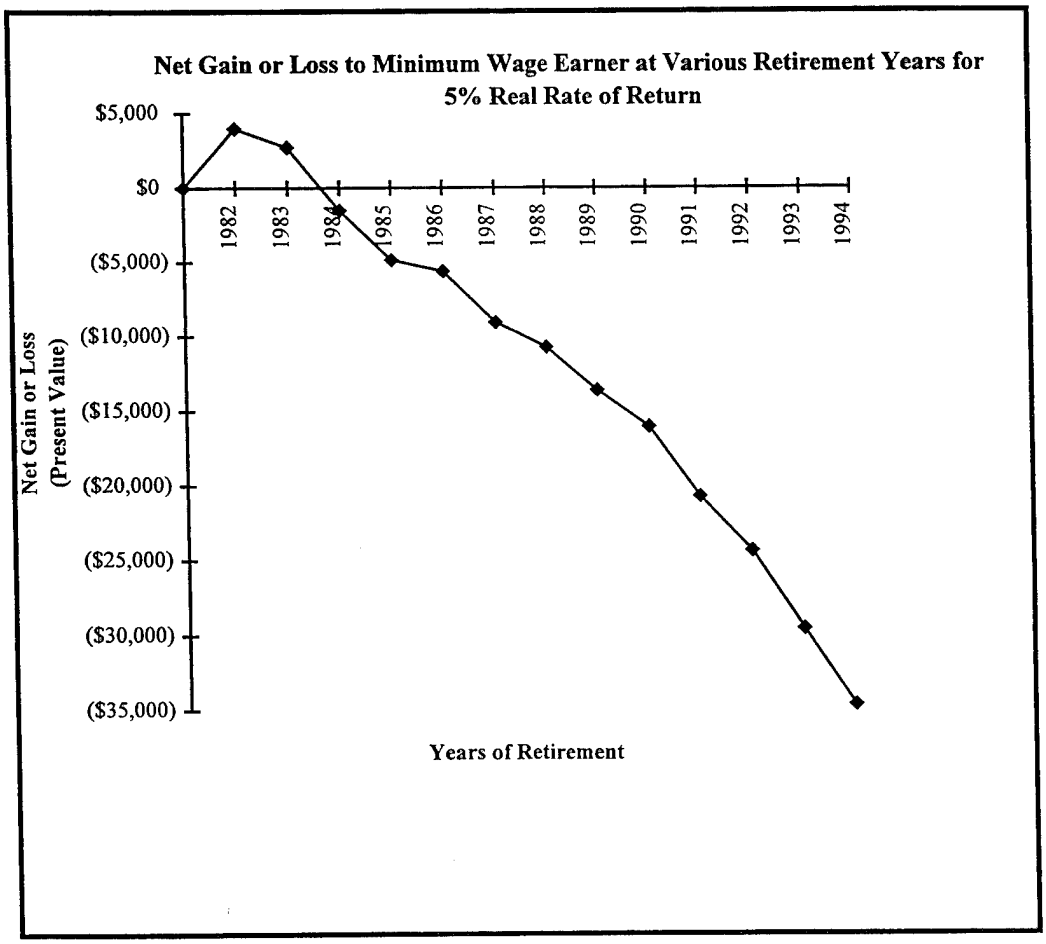
Net Present Value Position of Minimum Wage Earner
at Various Retirement Years and Various Interest Rates*

YEAR OF RETIREMENT AT AGE 65	REAL INTEREST RATES				
	2%	4%	5%	6%	7%
1982	$ 28,716.10	$ 13,083.22	$ 3,965.06	$ (6,564.83)	$ (19,066.52)
1983	$ 29,184.55	$ 12,517.69	$ 2,723.14	$ (8,631.64)	$ (22,149.55)
1984	$ 26,610.66	$ 8,968.78	$ (1,518.18)	$ (13,753.04)	$ (28,390.18)
1985	$ 25,301.00	$ 6,458.95	$ (4,867.60)	$ (18,169.89)	$ (34,173.23)
1986	$ 26,942.46	$ 6,625.52	$ (5,637.71)	$ (20,079.71)	$ (37,497.94)
1987	$ 26,649.32	$ 18,879.55	$ (9,088.58)	$ (24,603.72)	$ (43,858.16)
1988	$ 28,251.62	$ 4,090.02	$ (10,756.74)	$ (28,444.98)	$ (50,006.20)
1989	$ 29,271.70	$ 2,762.08	$ (13,630.26)	$ (33,243.25)	$ (57,246.14)
1990	$ 31,755.14	$ 2,225.15	$ (16,059.46)	$ (38,204.87)	$ (65,321.98)
1991	$ 31,702.64	$ (503.26)	$ (20,746.21)	$ (45,242.04)	$ (75,549.22)
1992	$ 32,589.67	$ (2,251.90)	$ (24,391.55)	$ (51,378.90)	$ (85,002.61)
1993	$ 32,280.86	$ (5,367.14)	$ (29,559.83)	$ (59,276.82)	$ (96,576.91)
1994	$ 30,893.47	$ (8,886.45)	$ (34,639.86)	$ (66,414.68)	$ (106,450.03)
*Parantheses indicate a negative, thus implying a net loss.					

expectancy after age 65. In other words, a minimum wage earner who could have been putting his taxes into the stock market over his entire lifetime of work and retiring at the age of 65 after 1982 would never receive Social Security benefits equaling the amount of taxes paid into this system.

As Graph 3.1 depicts, a minimum wage earner assuming a 5 percent real rate of return retiring after 1983 starts to see red with regards to a net present value analysis of benefits received and taxes paid.

GRAPH 3.1



This graph representing a minimum wage earner, assuming a 5 percent real rate of return, shows how drastically individuals lose with regards to Social Security even under conservative assumptions.

2. Average-Wage Earner - Various Interest Rates

As Table 3.2 depicts, an average wage earner's net present value analysis is even bleaker than an individual making minimum wage, as one would expect. However, an

TABLE 3.2

Net Present Value Position of Average Wage Earner
at Various Retirement Years and Various Interest Rates*

YEAR OF RETIREMENT AT AGE 65	REAL INTEREST RATES				
	2%	4%	5%	6%	7%
1982	$ 32,305.21	$ 4,653.35	$ (12,103.16)	$ (31,927.02)	$ (55,983.93)
1983	$ 32,138.29	$ 2,498.91	$ (15,598.28)	$ (37,095.06)	$ (63,262.58)
1984	$ 27,195.27	$ (4,410.76)	$ (23,918.04)	$ (47,226.07)	$ (75,728.14)
1985	$ 24,095.20	$ (9,835.79)	$ (30,990.15)	$ (56,413.53)	$ (87,654.28)
1986	$ 23,349.84	$ (12,898.17)	$ (35,615.23)	$ (63,000.80)	$ (96,739.79)
1987	$ 23,991.32	$ (15,535.61)	$ (40,407.70)	$ (70,464.61)	$ (107,571.86)
1988	$ 22,609.24	$ (20,364.95)	$ (47,587.50)	$ (80,606.00)	$ (121,488.13)
1989	$ 24,652.79	$ (22,818.61)	$ (52,946.38)	$ (89,539.28)	$ (278,515.23)
1990	$ 23,734.19	$ (28,830.40)	$ (62,407.66)	$ (103,363.20)	$ (154,336.97)
1991	$ 21,909.98	$ (35,524.60)	$ (72,504.30)	$ (117,838.62)	$ (174,524.55)
1992	$ 21,560.22	$ (40,615.16)	$ (80,968.66)	$ (130,693.12)	$ (193,165.12)
1993	$ 22,030.15	$ (45,532.00)	$ (89,658.19)	$ (144,271.55)	$ (213,182.56)
1994	$ 18,092.80	$ (53,849.55)	$ (101,175.78)	$ (160,002.76)	$ (234,509.99)

*Parantheses indicate a negative, thus implying a net loss.

average wage earner, assuming a 2 percent real interest rate, will still receive a net present value gain in benefits over taxes paid into Social Security through the years of analysis for this thesis.

However, an individual, assuming a four percent interest rate, finds a break-even year at 1983. An average wage earner, assuming a four percent interest rate, will start to lose money retiring at age 65 from 1984 on to present day. An individual who would retire in 1994 at age 65 has a net present value loss of over 54,000 dollars. This amount nearly doubles for an individual, if we assume an interest rate of five percent.

An average wage earner, assuming an interest rate higher than five percent, receives a negative net present value analysis for the entire period covered within this thesis. It can also be assumed that without any changes in the structure of Social Security, these figures will look even bleaker for individuals retiring in years following 1994.

As Graph 3.2 depicts, there is a sharp decline in losses for individuals earning an average wage under the assumption of a five percent real rate of return. These losses for an average wage earner are very significant. It shows how worse off an individual earning an average wage is, under present value analysis, than if he had been able to invest his taxes into mutual funds or even the stock market.

3. Maximum Wage Earner - Various Interest Rates

As Table 3.3 reflects, a maximum wage earner, assuming a two percent interest rate, will have a net present value gain through 1991. Any individual retiring after 1991 at the age of 65 will receive a negative net present value return on his benefits. The data also shows

that using the minimum assumption of a two percent interest rate, a conservative estimate used by Social Security analysts, maximum wage earners retiring today will never recover taxes paid into Social Security.

GRAPH 3.2

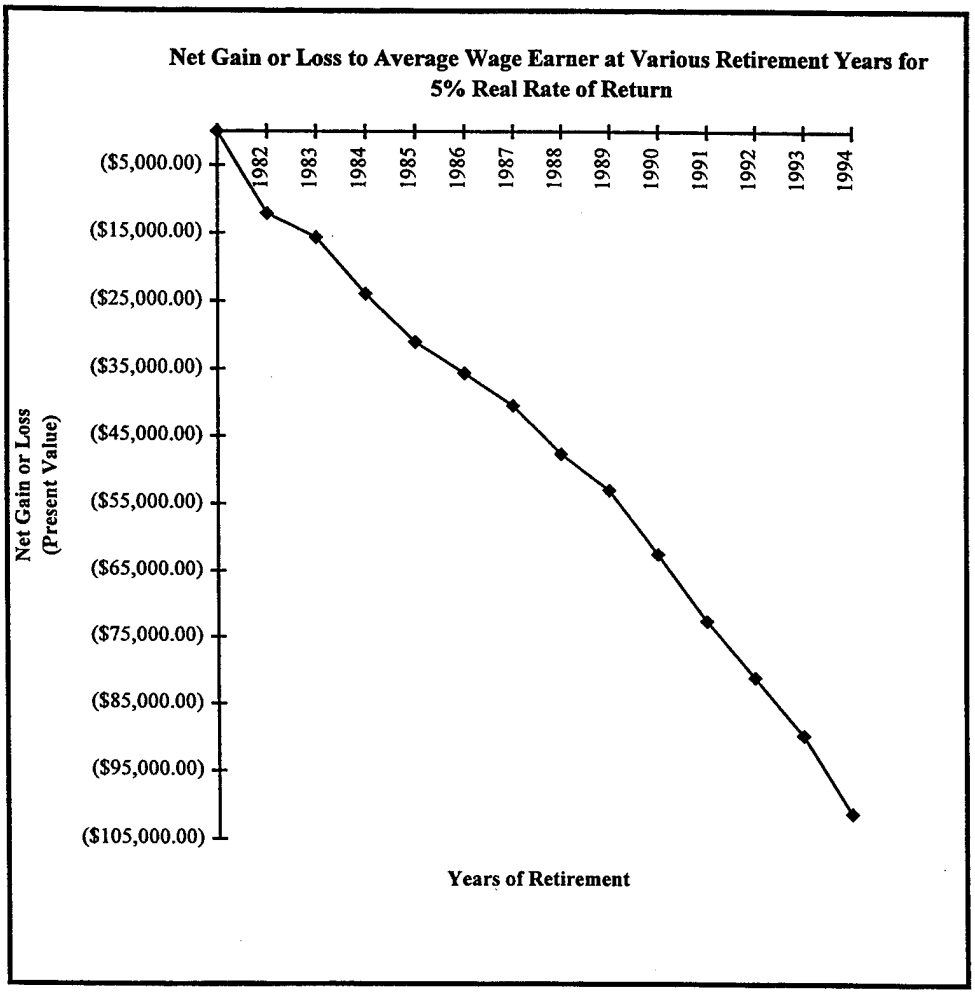


TABLE 3.3

Net Present Value Position of Maximum Wage Earner
at Various Retirement Years and Various Interest Rates*

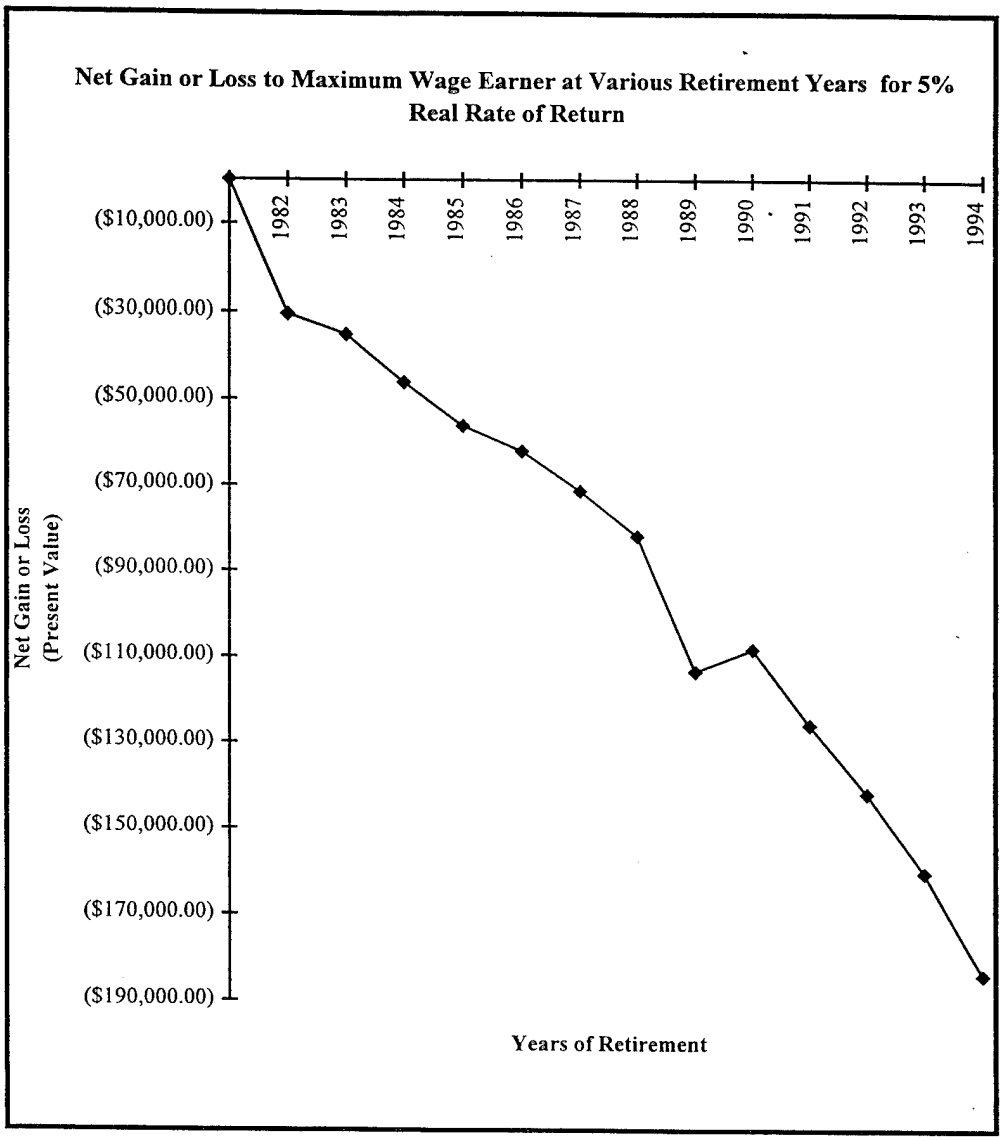
YEAR OF RETIREMENT AT AGE 65	REAL INTEREST RATES				
	2%	4%	5%	6%	7%
1982	$ 30,020.61	$ (7,187.48)	$ (30,410.76)	$ (58,512.39)	$ (93,427.52)
1983	$ 28,962.53	$ (10,494.78)	$ (35,093.44)	$ (64,792.74)	$ (101,579.57)
1984	$ 21,708.19	$ (19,967.91)	$ (45,994.69)	$ (77,392.50)	$ (116,200.76)
1985	$ 16,396.16	$ (28,117.98)	$ (55,998.16)	$ (89,650.36)	$ (131,224.21)
1986	$ 15,553.54	$ (32,077.93)	$ (61,843.93)	$ (97,693.28)	$ (141,864.07)
1987	$ 13,066.76	$ (38,759.84)	$ (71,174.47)	$ (110,205.63)	$ (158,259.12)
1988	$ 10,664.78	$ (46,169.04)	$ (81,788.09)	$ (124,698.37)	$ (177,516.75)
1989	$ 9,017.96	$ (53,894.68)	$ (113,332.86)	$ (140,835.95)	$ (199,281.18)
1990	$ 6,396.35	$ (63,898.38)	$ (108,060.21)	$ (161,316.26)	$ (226,896.05)
1991	$ 590.98	$ (76,825.69)	$ (125,749.40)	$ (184,955.49)	$ (258,084.74)
1992	$ (3,313.90)	$ (87,886.48)	$ (141,686.67)	$ (207,058.02)	$ (288,097.80)
1993	$ (8,458.37)	$ (101,003.71)	$ (160,243.90)	$ (232,518.85)	$ (322,461.52)
1994	$ (20,505.57)	$ (119,830.35)	$ (183,894.10)	$ (262,386.82)	$ (360,421.24)
*Parantheses indicate a negative, thus implying a net loss.					

Additionally, any maximum wage earner, using an interest rate greater than four percent, will never recover his amount of taxes paid into Social Security since the inception of the Social Security Amendments, which for people retiring at the age of 65 took effect in 1982.

As Graph 3.3 indicates, a maximum wage earner has a sharp downward sloping net loss in benefits, assuming a very conservative five percent real rate of return. An individual

retiring in 1994 at the age of 65 would have a net present value loss of $185,097.06. This amount of money for a maximum wage earner is considerably high. As the above data depicts, the majority of people, using various assumptions for real interest rates, incur a net present value loss.

GRAPH 3.3


Net Gain or Loss to Maximum Wage Earner at Various Retirement Years for 5% Real Rate of Return
($10,000.00)
($30,000.00)
($50,000.00)
($70,000.00)
($90,000.00)
($110,000.00)
($130,000.00)
($150,000.00)
($170,000.00)
($190,000.00)
Net Gain or Loss (Present Value)
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
Years of Retirement

IV. RECOMMENDATIONS AND CONCLUSIONS

Using present value analysis, this thesis set forth to determine whether or not individuals are as well off or worse off using the government as their broker. The data and the analysis show quite clearly that Social Security does not provide pensions as well as the private sector can.

A. CONCLUSIONS PRESENTED FROM ANALYSIS

The first conclusion one can draw from this thesis is that individuals have the ability to calculate the taxes they have paid into Social Security, as well as the benefits they should receive if they retire at the age of 65. Most Americans take Social Security for granted in that, once they retire, they accept their monthly check without ever asking: what is the rate of return on my investment--i.e.,taxes paid--from Social Security? When the government tells individuals they will recover their taxes, they do not take into account the time value of money. That is, a dollar yesterday is worth more than it is today.

Only a present value analysis of taxes and benefits can show an individual what his taxes are actually worth, given some real rate of return and what his benefits will be worth given the same interest rate over his life expectancy.

The data and analysis in Chapter III clearly show that the majority of people in all wage-earning groups have a net present value loss when comparing their taxes and benefits. The only way to conclude that any individuals experience a net gain is to assume an artificially low real rate of return on the order of two percent, which is used by the Social

Security Administration itself. Even so, trends show that, as we approach the 21st century, net gains are declining. The data indicate that, under present value analysis, all individuals will become losers with respect to their taxes paid into Social Security.

1. Private Institutions Provide Insurance

The insurance function of Social Security, on which this thesis concentrates, could be served by private institutions in the free market. The money that people presently are paying in Social security taxes could be used to buy insurance and investments, stocks, mutual funds, etc., that would cover any type of contingency an individual might face.

As the Tables in Chapter III demonstrated, most individuals from any wage group, assuming a greater than six percent real interest rate, would never be able to recover the amount of taxes paid into Social Security. Instead of individuals paying taxes into a system that provides no significant real rate of return, taxpayers could take that money and invest it in productive assets to earn a higher rate of return. Using the data this thesis provided, the next step would be to find out how much of either the employee's or the employer's portion of the tax could be given to individuals to invest in the private sector. Analysis could show that a portion could be given to an individual, while the remainder could go toward paying current beneficiaries who are presently in the system collecting retirement checks.

This change would help in a variety of ways. As stated in the Introduction, Social Security is headed for bankruptcy in 2029. Various alternatives should be explored to avoid a predicted disaster. By allowing individuals to opt out of Social Security, the government

could pay off current beneficiaries with a portion of the OASI tax and allow certain individuals greater prosperity from the opportunity to invest in the private sector.

2. DoD/DoN Applications

The chain reaction of allowing individuals to invest in the private sector would have major effects on the budgetary process. If Social Security is allowed to bail itself out by letting individuals opt out, general taxes will not be raised as much to help pay off future beneficiaries. In turn, Defense budgets that are already being cut in times of budgetary constraints will be under less pressure. The DoD/DoN will benefit directly from people's ability to earn a better retirement by investing in their own futures.

B. RECOMMENDATIONS FOR FUTURE THESIS

This thesis put Social Security under a present value analysis microscope. What further studies can be done? Though there are many possibilities, I believe the best avenue to examine is privatization.

1. Privatize Social Security

Using the data in this thesis, a spread sheet could be used to determine how much of the employee's or employer's tax an individual would need to receive in order to do better by investing in the free market. The rest of the tax would be used to pay off current beneficiaries within Social Security. A researcher could search for a break-even age under which an individual would be better off by investing in the private sector with a small percentage of his OASI tax than by remaining in Social Security.

It is important to understand that this thesis did not consider the welfare function of Social Security. A more complete analysis would estimate an actuarial value of the survivor benefit portion of Social Security and would add this benefit to the benefit stream completed in Chapter III.

Unless Social Security is drastically reformed, taxes must increase to pay off future beneficiaries, and/or benefits must decrease. By privatizing the system, we could avoid this dismal scenario.

APPENDIX A. CONSUMER PRICE INDEXES FOR MAJOR EXPENDITURE CLASSES, 1935-60 (FOR ALL URBAN CONSUMERS; 1947-49=100)

PERIOD	ALL ITEMS
1935	58.7
1936	59.3
1937	61.4
1938	60.3
1939	59.4
1940	59.9
1941	62.9
1942	69.7
1943	74.0
1944	75.2
1945	76.9
1946	83.4
1947	95.5
1948	102.8
1949	101.8
1950	102.8
1951	111.0
1952	113.5
1953	114.4
1954	114.8
1955	114.5
1596	116.2
1957	120.2
1958	123.5
1959	124.6
1960	126.4

Source: Department of Labor

APPENDIX B. CONSUMER PRICE INDEXES FOR MAJOR EXPENDITURE CLASSES, 1950-94, (FOR ALL URBAN CONSUMERS; 1982-84=100)

PERIOD	ALL ITEMS	PERIOD	ALL ITEMS	PERIOD	ALL ITEMS
1950	24.1	1965	31.5	1980	82.4
1951	26.0	1966	32.4	1981	90.9
1952	26.5	1967	33.4	1982	96.5
1953	26.7	1968	34.8	1983	99.6
1954	26.9	1969	36.7	1984	103.9
1955	26.8	1970	38.8	1985	107.6
1956	27.2	1971	40.5	1986	109.6
1957	28.1	1972	41.8	1987	113.6
1958	28.9	1973	44.4	1988	118.3
1959	29.1	1974	49.3	1989	124.0
1960	29.6	1975	53.8	1990	130.7
1961	29.9	1976	56.9	1991	136.2
1962	30.2	1977	60.6	1992	140.3
1963	30.6	1978	65.2	1993	144.5
1964	31.0	1979	72.6	1994	148.2

Source: Department of Labor

APPENDIX C. BENDPOINTS FOR CALCULATING PRIMARY INSURANCE AMOUNT (PIA)

Eligibility Year	Bend Points for AIME	Sum of Percentage Calculations (Using Full Bend Points)
1979	Up through $180 $181 - $1085 $1086 or higher	90 percent of AIME $162.00 plus 32% of excess of $180 $451.60 plus 15% of excess of $1085
1980	Up through $194 $195 - $1171 $1172 or higher	90 percent of AIME $174.60 plus 32% of excess of $194 $487.24 plus 15% of excess of $1171
1981	Up through $211 $212 - $1274 $1275 or higher	90 percent of AIME $189.90 plus 32% of excess of $211 $530.06 plus 15% of excess of $1274
1982	Up through $230 $231 - $1388 $1389 or higher	90 percent of AIME $207.00 plus 32% of excess of $230 $577.56 plus 15% of excess of $1388
1983	Up through $254 $255 - $1528 $1529 or higher	90 percent of AIME $228.60 plus 32% of ecess of $254 $636.28 plus 15% of excess of $1528
1984	Up through $267 $268 - $1612 $1613 or higher	90 percent of AIME $240.30 plus 32% of excess of $267 $670.70 plus 15% of excess of $1612
1985	Up through $280 $281 - $1691 $1692 or higher	90 percent of AIME $252.00 plus 32% of excess of $280 $703.52 plus 15% of excess of $1691
1986	Up through $297 $298 - $1790 $1791 or higher	90 percent of AIME $267.30 plus 32% of excess of $297 $745.06 plus 15% of excess of $1790
1987	Up through $310 $311 - $1866 $1867 or higher	90 percent of AIME $279.00 plus 32% of excess of $310 $776.92 plus 15% of excess of $1866
1988	Up through $319 $320 - $1922 $1923 or higher	90 percent of AIME $287.10 plus 32% of excess of $319 $800.06 plus 15% of excess of $1922
1989	Up through $339 $340 - $2044 $2045 or higher	90 percent of AIME $305.10 plus 32% of excess of $339 $850.,70 plus 15% of excess of $2044
1990	Up through $356 $357 - $2145 $2146 or higher	90 percent of AIME $320.40 plus 32% of excess of $356 $892.88 plus 15% of excess of $2145
1991	Up through $370 $371 - $2230 $2231 or higher	90 percent of AIME $333.00 plus 32% of excess of $370 $928.20 plus 15% of excess of $2230
1992	Up through $387 $388 - $2333 $2334 or higher	90 percent of AIME $348.30 plus 32% of excess of $387 $971.02 plus 15% of excess of $2333

Source: Social Security Administration

APPENDIX D. SOCIAL SECURITY COST OF LIVING ADJUSTMENTS (COLA)

CALENDAR YEAR	COST OF LIVING ADJUSTMENT (%)
1979	9.9
1980	14.3
1981	11.2
1982	7.4
1983	3.5
1984	3.5
1985	3.1
1986	1.3
1987	4.2
1988	4.0
1989	4.7
1990	5.4
1991	3.7
1992	3.0
1993	2.6
1994	2.8

Source: 1995 Annual Report of the Board of Trustees of the Federal Old Age and Surivivors Insurance and Disability Insurance Trust Funds

APPENDIX E. LIFE EXPECTANCIES FOR MEN AT AGE 65

CALENDER YEAR	LIFE EXPECTANCY (YEARS)
1982	14.5
1983	14.3
1984	14.4
1985	14.4
1986	14.5
1987	14.6
1988	14.6
1989	14.8
1990	15.0
1991	15.1
1992	15.0
1993	15.1
1994	15.2

Source: 1995 Annual Report of the Board of Trustees of the Federal Old Age and Surivivors Insurance and Disability Insurance Trust Funds

APPENDIX F. PRESENT VALUE OF TAXES PAID FOR A MINIMUM WAGE EARNER RETIRING AT AGE 65 IN 1982 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	EARNINGS	OASI EMPLOYER TAX RATE	OASI EMPLOYEE TAX RATE	OASI (TAXES PAID)	CPI ADJUSTMENT	TAXES PAID IN PRESENT VALUE DOLLARS
1939	$624	1.000%	1.000%	$12.48	$86.48	$704.81
1940	$624	1.000%	1.000%	$12.48	$85.76	$665.64
1941	$624	1.000%	1.000%	$12.48	$81.67	$603.71
1942	$624	1.000%	1.000%	$12.48	$73.70	$518.87
1943	$624	1.000%	1.000%	$12.48	$69.42	$465.45
1944	$624	1.000%	1.000%	$12.48	$68.31	$436.21
1945	$832	1.000%	1.000%	$16.64	$89.07	$541.67
1946	$832	1.000%	1.000%	$16.64	$82.13	$475.67
1947	$832	1.000%	1.000%	$16.64	$71.72	$395.62
1948	$832	1.000%	1.000%	$16.64	$66.63	$350.03
1949	$832	1.000%	1.000%	$16.64	$67.28	$336.63
1950	$1,499	1.500%	1.500%	$44.97	$180.07	$858.01
1951	$1,560	1.500%	1.500%	$46.80	$173.70	$788.26
1952	$1,560	1.500%	1.500%	$46.80	$170.42	$736.56
1953	$1,560	1.500%	1.500%	$46.80	$169.15	$696.23
1954	$1,560	2.000%	2.000%	$62.40	$223.85	$877.53
1955	$1,560	2.000%	2.000%	$62.40	$224.69	$838.86
1956	$1,993	2.000%	2.000%	$79.72	$282.83	$1,005.65
1957	$2,080	2.000%	2.000%	$83.20	$285.72	$967.56
1958	$2,080	2.000%	2.000%	$83.20	$277.81	$895.98
1959	$2,080	2.250%	2.250%	$93.60	$310.39	$953.38
1960	$2,080	2.750%	2.750%	$114.40	$372.96	$1,091.00
1961	$2,184	2.750%	2.750%	$120.12	$387.68	$1,080.06
1962	$2,392	2.875%	2.875%	$137.54	$439.49	$1,166.10
1963	$2,461	3.375%	3.375%	$166.12	$523.87	$1,323.79
1964	$2,600	3.375%	3.375%	$175.50	$546.31	$1,314.77
1965	$2,600	3.375%	3.375%	$175.50	$537.64	$1,232.29
1966	$2,600	3.500%	3.500%	$182.00	$542.07	$1,183.27
1967	$2,886	3.550%	3.550%	$204.91	$592.02	$1,230.76
1968	$3,293	3.325%	3.325%	$218.98	$607.24	$1,202.30
1969	$3,328	3.725%	3.725%	$247.94	$651.93	$1,229.31
1970	$3,328	3.650%	3.650%	$242.94	$604.23	$1,085.11
1971	$3,328	4.050%	4.050%	$269.57	$642.30	$1,098.56
1972	$3,328	4.050%	4.050%	$269.57	$622.33	$1,013.71
1973	$3,328	4.300%	4.300%	$286.21	$622.05	$965.01
1974	$3,883	4.375%	4.375%	$339.76	$665.05	$982.59
1975	$4,368	4.375%	4.375%	$382.20	$685.54	$964.63
1976	$4,784	4.375%	4.375%	$418.60	$709.93	$951.37
1977	$4,784	4.375%	4.375%	$418.60	$666.58	$850.75
1978	$5,512	4.275%	4.275%	$471.28	$697.52	$847.84
1979	$6,032	4.330%	4.330%	$522.37	$694.34	$803.78
1980	$6,448	4.520%	4.520%	$582.90	$682.64	$752.61
1981	$6,968	4.700%	4.700%	$654.99	$695.34	$730.11
1982	$6,968	4.575%	4.575%	$637.57	$637.57	$637.57
						$37,849.56

APPENDIX G. PRESENT VALUE OF BENEFITS RECEIVED FROM A MINIMUM WAGE EARNER RETIRING AT 65 IN 1982 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR		MIN. WAGE EARNER		INDEXING FACTOR		INDEXED EARNINGS	5 LOWEST EARNINGS	EARNING YEARS USED +
1951		$1,560.00		3.4937053		$5,450.18		$5,450.18
1952		$1,560.00		3.2890641		$5,130.94		$5,130.94
1953		$1,560.00		3.1150269		$4,859.44		$4,859.44
1954		$1,560.00		3.0990354		$4,834.50		$4,834.50
1955		$1,560.00		2.9621741		$4,620.99	*	
1956		$1,993.00		2.7685287		$5,517.68		$5,517.68
1957		$2,080.00		2.6853904		$5,585.61		$5,585.61
1958		$2,080.00		2.6619413		$5,536.84		$5,536.84
1959		$2,080.00		2.5362934		$5,275.49		$5,275.49
1960		$2,080.00		2.4405159		$5,076.27		$5,076.27
1961		$2,184.00		2.3929568		$5,226.22		$5,226.22
1962		$2,392.00		2.2788461		$5,451.00		$5,451.00
1963		$2,461.00		2.2242986		$5,474.00		$5,474.00
1964		$2,600.00		2.1369659		$5,556.11		$5,556.11
1965		$2,600.00		2.0991689		$5,457.84		$5,457.84
1966		$2,600.00		1.9803012		$5,148.78		$5,148.78
1967		$2,886.00		1.8758133		$5,413.60		$5,413.60
1968		$3,293.00		1.7551797		$5,779.81		$5,779.81
1969		$3,328.00		1.6592871		$5,522.11		$5,522.11
1970		$3,328.00		1.5808375		$5,261.03		$5,261.03
1971		$3,328.00		1.5052054		$5,009.32		$5,009.32
1972		$3,328.00		1.3708599		$4,562.22	*	
1973		$3,328.00		1.2901364		$4,293.57	*	
1974		$3,883.00		1.2177478		$4,728.51	*	
1975		$4,368.00		1.1330704		$4,949.25		$4,949.25
1976		$4,784.00		1.0599318		$5,070.71		$5,070.71
1977		$4,784.00		1.0000000		$4,784.00	*	
1978		$5,512.00		1.0000000		$5,512.00		$5,512.00
1979		$6,032.00		1		$6,032.00		

+ = Used by Social Security to compute benefits

	$122,098.73	
	/276	
	$442	
	-180	
	$262	
	x .32	
	$83.96	
	+ 162	
	$245.96	1979 at age 62
	x 1.099	
	$270.31	
	x 1.143	
	$308.97	
	x 1.112	
	$343.57	1982 at age 65
	x 12	
	$4,122.88	
PRESENT VALUES:	$51,451.92	2%
	$44,706.39	4%
	$41,814.62	**5%**
	$39,194.83	6%
	$36,816.34	7%

APPENDIX H. PRESENT VALUE OF TAXES PAID FOR A MINIMUM WAGE EARNER RETIRING AT AGE 65 IN 1984 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	EARNINGS	OASI EMPLOYER TAX RATE	OASI EMPLOYEE TAX RATE	OASI (TAXES PAID)	CPI ADJUSTMENT	TAXES PAID IN PRESENT VALUE DOLLARS
1941	$624	1.000%	1.000%	$12.48	$79.35	$646.72
1942	$624	1.000%	1.000%	$12.48	$79.35	$615.92
1943	$624	1.000%	1.000%	$12.48	$74.74	$552.50
1944	$624	1.000%	1.000%	$12.48	$73.55	$517.80
1945	$832	1.000%	1.000%	$16.64	$95.90	$642.99
1946	$832	1.000%	1.000%	$16.64	$88.43	$564.64
1947	$832	1.000%	1.000%	$16.64	$77.22	$469.62
1948	$832	1.000%	1.000%	$16.64	$71.74	$415.50
1949	$832	1.000%	1.000%	$16.64	$72.44	$399.60
1950	$1,499	1.500%	1.500%	$44.97	$193.87	$1,018.49
1951	$1,560	1.500%	1.500%	$46.80	$187.02	$935.70
1952	$1,560	1.500%	1.500%	$46.80	$183.49	$874.33
1953	$1,560	1.500%	1.500%	$46.80	$182.12	$826.45
1954	$1,560	2.000%	2.000%	$62.40	$241.02	$1,041.66
1955	$1,560	2.000%	2.000%	$62.40	$241.92	$995.76
1956	$1,993	2.000%	2.000%	$79.72	$304.52	$1,193.75
1957	$2,080	2.000%	2.000%	$83.20	$307.63	$1,148.53
1958	$2,080	2.000%	2.000%	$83.20	$299.12	$1,063.56
1959	$2,080	2.250%	2.250%	$93.60	$334.19	$1,131.70
1960	$2,080	2.750%	2.750%	$114.40	$401.56	$1,295.07
1961	$2,184	2.750%	2.750%	$120.12	$417.41	$1,282.08
1962	$2,392	2.875%	2.875%	$137.54	$473.19	$1,384.21
1963	$2,461	3.375%	3.375%	$166.12	$564.04	$1,571.39
1964	$2,600	3.375%	3.375%	$175.50	$588.21	$1,560.69
1965	$2,600	3.375%	3.375%	$175.50	$578.87	$1,462.78
1966	$2,600	3.500%	3.500%	$182.00	$583.64	$1,404.59
1967	$2,886	3.550%	3.550%	$204.91	$637.42	$1,460.97
1968	$3,293	3.325%	3.325%	$218.98	$653.81	$1,427.18
1969	$3,328	3.725%	3.725%	$247.94	$701.92	$1,459.25
1970	$3,328	3.650%	3.650%	$242.94	$650.56	$1,288.07
1971	$3,328	4.050%	4.050%	$269.57	$691.56	$1,304.04
1972	$3,328	4.050%	4.050%	$269.57	$670.05	$1,203.31
1973	$3,328	4.300%	4.300%	$286.21	$669.75	$1,145.50
1974	$3,883	4.375%	4.375%	$339.76	$716.05	$1,166.37
1975	$4,368	4.375%	4.375%	$382.20	$738.11	$1,145.06
1976	$4,784	4.375%	4.375%	$418.60	$764.37	$1,129.32
1977	$4,784	4.375%	4.375%	$418.60	$717.70	$1,009.87
1978	$5,512	4.275%	4.275%	$471.28	$751.01	$1,006.42
1979	$6,032	4.330%	4.330%	$522.37	$747.58	$954.12
1980	$6,448	4.520%	4.520%	$582.90	$734.99	$893.39
1981	$6,968	4.700%	4.700%	$654.99	$748.67	$866.67
1982	$6,968	4.575%	4.575%	$637.57	$686.46	$756.83
1983	$6,968	4.775%	4.775%	$665.44	$694.17	$728.88
1984	$6,968	4.926%	4.926%	$686.49	$686.49	$686.49
						$44,647.77

APPENDIX I. PRESENT VALUE OF BENEFITS RECEIVED FROM A MINIMUM WAGE EARNER RETIRING AT 65 IN 1984 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	MIN. WAGE EARNER	INDEXING FACTOR	INDEXED EARNINGS	5 LOWEST EARNINGS	EARNING YEARS USED +
1951	$1,560.00	4.1010375	$6,397.62		$6,397.62
1952	$1,560.00	3.8608222	$6,022.88		$6,022.88
1953	$1,560.00	3.656311	$5,703.85		$5,703.85
1954	$1,560.00	3.6377597	$5,674.91		$5,674.91
1955	$1,560.00	3.477107	$5,424.29	*	
1956	$1,993.00	3.249799	$6,476.85		$6,476.85
1957	$2,080.00	3.1522083	$6,556.59		$6,556.59
1958	$2,080.00	3.1246829	$6,499.34		$6,499.34
1959	$2,080.00	2.9771928	$6,192.56		$6,192.56
1960	$2,080.00	2.8647657	$5,958.71		$5,958.71
1961	$2,184.00	2.8089391	$6,134.72		$6,134.72
1962	$2,392.00	2.6749918	$6,398.58		$6,398.58
1963	$2,461.00	2.610962	$6,425.58		$6,425.58
1964	$2,600.00	2.5084478	$6,521.96		$6,521.96
1965	$2,600.00	2.4640803	$6,406.61		$6,406.61
1966	$2,600.00	2.324549	$6,043.83		$6,043.83
1967	$2,886.00	2.2018974	$6,354.68		$6,354.68
1968	$3,293.00	2.0602933	$6,784.55		$6,784.55
1969	$3,328.00	1.9477312	$6,482.05		$6,482.05
1970	$3,328.00	1.8556441	$6,175.58		$6,175.58
1971	$3,328.00	1.7668645	$5,880.13		$5,880.13
1972	$3,328.00	1.6091648	$5,355.30	*	
1973	$3,328.00	1.5144087	$5,039.95	*	
1974	$3,883.00	1.4294363	$5,550.50	*	
1975	$4,368.00	1.330039	$5,809.61		$5,809.61
1976	$4,784.00	1.2441863	$5,952.19		$5,952.19
1977	$4,784.00	1.1738361	$5,615.63	*	
1978	$5,512.00	1.0874789	$5,994.18		$5,994.18
1979	$6,032.00	1	$6,032.00		$6,032.00
1980	$6,448.00	1	$6,448.00		$6,448.00
1981	$6,968.00	1	$6,968.00		

+ = Used by Social Security to compute benefits

$155,327.55
/300
$518
- 211
$307
x .32
$98.16
+ 189.9
$288.06 1981 at age 62
x 1.112
$320.33
x 1.074
$344.03
x 1.0353
$356.07 1984 at age 65
x 12
$4,272.85

PRESENT VALUES:

$53,005.66	2%
$46,094.85	4%
$43,129.59	**5%**
$40,441.73	6%
$38,000.15	7%

APPENDIX J. PRESENT VALUE OF TAXES PAID FOR A MINIMUM WAGE EARNER RETIRING AT AGE 65 IN 1992 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	EARNINGS	OASI EMPLOYER TAX RATE	OASI EMPLOYEE TAX RATE	OASI (TAXED PAID)	CPI ADJUSTMENT	TAXES PAID - PRESENT VALUE DOLLARS
1949	$832	1.000%	1.000%	$16.64	$97.82	$797.22
1950	$1,499	1.500%	1.500%	$44.97	$261.80	$2,031.95
1951	$1,560	1.500%	1.500%	$46.80	$252.54	$1,866.77
1952	$1,560	1.500%	1.500%	$46.80	$247.78	$1,744.33
1953	$1,560	1.500%	1.500%	$46.80	$245.92	$1,648.83
1954	$1,560	2.000%	2.000%	$62.40	$325.45	$2,078.18
1955	$1,560	2.000%	2.000%	$62.40	$326.67	$1,986.61
1956	$1,993	2.000%	2.000%	$79.72	$411.20	$2,381.61
1957	$2,080	2.000%	2.000%	$83.20	$415.41	$2,291.40
1958	$2,080	2.000%	2.000%	$83.20	$403.91	$2,121.87
1959	$2,080	2.250%	2.250%	$93.60	$451.27	$2,257.81
1960	$2,080	2.750%	2.750%	$114.40	$542.24	$2,583.74
1961	$2,184	2.750%	2.750%	$120.12	$563.64	$2,557.82
1962	$2,392	2.875%	2.875%	$137.54	$638.97	$2,761.59
1963	$2,461	3.375%	3.375%	$166.12	$761.64	$3,135.03
1964	$2,600	3.375%	3.375%	$175.50	$794.28	$3,113.68
1965	$2,600	3.375%	3.375%	$175.50	$781.67	$2,918.34
1966	$2,600	3.500%	3.500%	$182.00	$788.10	$2,802.24
1967	$2,886	3.550%	3.550%	$204.91	$860.73	$2,914.73
1968	$3,293	3.325%	3.325%	$218.98	$882.86	$2,847.31
1969	$3,328	3.725%	3.725%	$247.94	$947.83	$2,911.29
1970	$3,328	3.650%	3.650%	$242.94	$878.48	$2,569.78
1971	$3,328	4.050%	4.050%	$269.57	$933.84	$2,601.63
1972	$3,328	4.050%	4.050%	$269.57	$904.79	$2,400.69
1973	$3,328	4.300%	4.300%	$286.21	$904.39	$2,285.35
1974	$3,883	4.375%	4.375%	$339.76	$966.91	$2,326.98
1975	$4,368	4.375%	4.375%	$382.20	$996.70	$2,284.46
1976	$4,784	4.375%	4.375%	$418.60	$1,032.15	$2,253.06
1977	$4,784	4.375%	4.375%	$418.60	$969.13	$2,014.76
1978	$5,512	4.275%	4.275%	$471.28	$1,014.11	$2,007.87
1979	$6,032	4.330%	4.330%	$522.37	$1,009.49	$1,903.54
1980	$6,448	4.520%	4.520%	$582.90	$992.48	$1,782.36
1981	$6,968	4.700%	4.700%	$654.99	$1,010.95	$1,729.07
1982	$6,968	4.575%	4.575%	$637.57	$926.96	$1,509.92
1983	$6,968	4.775%	4.775%	$665.44	$937.37	$1,454.16
1984	$6,968	4.926%	4.926%	$686.49	$926.99	$1,369.59
1985	$6,968	5.200%	5.200%	$724.67	$944.90	$1,329.57
1986	$6,968	5.200%	5.200%	$724.67	$927.66	$1,243.15
1987	$6,968	5.200%	5.200%	$724.67	$895.00	$1,142.27
1988	$6,968	5.530%	5.530%	$770.66	$913.98	$1,110.95
1989	$6,968	5.300%	5.300%	$738.61	$835.70	$967.43
1990	$7,670	5.600%	5.600%	$859.04	$922.14	$1,016.66
1991	$8,606	5.600%	5.600%	$963.87	$992.89	$1,042.53
1992	$8,840	5.600%	5.600%	$990.08	$990.08	$990.08
						$89,088.21

APPENDIX K. PRESENT VALUE OF BENEFITS RECEIVED FROM A MINIMUM WAGE EARNER RETIRING AT 65 IN 1992 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	MIN. WAGE EARNER	INDEXING FACTOR	INDEXED EARNINGS	5 LOWEST YEARS	EARNING YEARS USED +
1951	$1,560.00	6.5828712	$10,269.28		$10,269.28
1952	$1,560.00	6.1972845	$9,667.76		$9,667.76
1953	$1,560.00	5.869362	$9,156.20		$9,156.20
1954	$1,560.00	5.8392307	$9,109.20		$9,109.20
1955	$1,560.00	5.5813554	$8,706.91		$8,706.91
1956	$1,993.00	5.2164869	$10,396.46		$10,396.46
1957	$2,080.00	5.0598371	$10,524.46		$10,524.46
1958	$2,080.00	5.015654	$10,432.56		$10,432.56
1959	$2,080.00	4.7789071	$9,940.13		$9,940.13
1960	$2,080.00	4.5984422	$9,564.76		$9,564.76
1961	$2,184.00	4.5088309	$9,847.29		$9,847.29
1962	$2,392.00	4.2938225	$10,270.82		$10,270.82
1963	$2,461.00	4.1910436	$10,314.16		$10,314.16
1964	$2,600.00	4.0264907	$10,468.88		$10,468.88
1965	$2,600.00	3.9552731	$10,283.71		$10,283.71
1966	$2,600.00	3.7313014	$9,701.38		$9,701.38
1967	$2,886.00	3.5344244	$10,200.35		$10,200.35
1968	$3,293.00	3.3071255	$10,890.36		$10,890.36
1969	$3,328.00	3.1264438	$10,404.80		$10,404.80
1970	$3,328.00	2.9786283	$9,912.87		$9,912.87
1971	$3,328.00	2.8361217	$9,438.61		$9,438.61
1972	$3,328.00	2.5829866	$8,596.18		$8,596.18
1973	$3,328.00	2.4308866	$8,089.99		$8,089.99
1974	$3,883.00	2.2944914	$8,909.51		$8,909.51
1975	$4,368.00	2.1349415	$9,325.42		$9,325.42
1976	$4,784.00	1.9971332	$9,554.29		$9,554.29
1977	$4,784.00	1.8842091	$9,014.06		$9,014.06
1978	$5,512.00	1.7455909	$9,621.70		$9,621.70
1979	$6,032.00	1.6051721	$9,682.40		$9,682.40
1980	$6,448.00	1.4725351	$9,494.91		$9,494.91
1981	$6,968.00	1.3378622	$9,322.22		$9,322.22
1982	$6,968.00	1.268053	$8,835.79		$8,835.79
1983	$6,968.00	1.2091488	$8,425.35		$8,425.35
1984	$6,968.00	1.1420161	$7,957.57	*	
1985	$6,968.00	1.0953484	$7,632.39	*	
1986	$6,968.00	1.0637744	$7,412.38	*	
1987	$6,968.00	1	$6,968.00	*	
1988	$6,968.00	1	$6,968.00	*	
1989	$6,968.00	1	$6,968.00		

+ = Used by Social Security to compute benefits

$318,372.79
/396
$804
- 339
$465
x .32
$148.79
+ 305.1
$453.89 1989 at age 62
x 1.047
$475.22
x 1.054
$500.89
x 1.037
$519.42 1992 at age 65
x 12
$6,233.02

PRESENT VALUES:

$80,089.77	2%
$69,301.18	4%
$64,696.66	**5%**
$60,536.68	6%
$56,769.85	7%

APPENDIX L. PRESENT VALUE OF TAXES PAID FOR A MINIMUM WAGE EARNER RETIRING AT AGE 65 IN 1994 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	EARNINGS	OASI EMPLOYER TAX RATE	OASI EMPLOYEE TAX RATE	OASI (TAXES PAID)	CPI ADJUSTMENT	TAXES PAID IN PRESENT VALUE DOLLARS
1951	$1,560	1.500%	1.500%	$46.80	$266.76	$2,174.01
1952	$1,560	1.500%	1.500%	$46.80	$261.73	$2,031.42
1953	$1,560	1.500%	1.500%	$46.80	$259.77	$1,920.19
1954	$1,560	2.000%	2.000%	$62.40	$343.78	$2,420.21
1955	$1,560	2.000%	2.000%	$62.40	$345.06	$2,313.56
1956	$1,993	2.000%	2.000%	$79.72	$434.36	$2,773.58
1957	$2,080	2.000%	2.000%	$83.20	$438.80	$2,668.51
1958	$2,080	2.000%	2.000%	$83.20	$426.65	$2,471.09
1959	$2,080	2.250%	2.250%	$93.60	$476.68	$2,629.40
1960	$2,080	2.750%	2.750%	$114.40	$572.77	$3,008.98
1961	$2,184	2.750%	2.750%	$120.12	$595.38	$2,978.79
1962	$2,392	2.875%	2.875%	$137.54	$674.95	$3,216.09
1963	$2,461	3.375%	3.375%	$166.12	$804.53	$3,650.99
1964	$2,600	3.375%	3.375%	$175.50	$839.00	$3,626.12
1965	$2,600	3.375%	3.375%	$175.50	$825.69	$3,398.63
1966	$2,600	3.500%	3.500%	$182.00	$832.48	$3,263.43
1967	$2,886	3.550%	3.550%	$204.91	$909.19	$3,394.43
1968	$3,293	3.325%	3.325%	$218.98	$932.57	$3,315.92
1969	$3,328	3.725%	3.725%	$247.94	$1,001.20	$3,390.43
1970	$3,328	3.650%	3.650%	$242.94	$927.95	$2,992.72
1971	$3,328	4.050%	4.050%	$269.57	$986.42	$3,029.81
1972	$3,328	4.050%	4.050%	$269.57	$955.74	$2,795.79
1973	$3,328	4.300%	4.300%	$286.21	$955.32	$2,661.47
1974	$3,883	4.375%	4.375%	$339.76	$1,021.36	$2,709.96
1975	$4,368	4.375%	4.375%	$382.20	$1,052.83	$2,660.44
1976	$4,784	4.375%	4.375%	$418.60	$1,090.27	$2,623.87
1977	$4,784	4.375%	4.375%	$418.60	$1,023.70	$2,346.35
1978	$5,512	4.275%	4.275%	$471.28	$1,071.21	$2,338.32
1979	$6,032	4.330%	4.330%	$522.37	$1,066.33	$2,216.82
1980	$6,448	4.520%	4.520%	$582.90	$1,048.37	$2,075.70
1981	$6,968	4.700%	4.700%	$654.99	$1,067.87	$2,013.64
1982	$6,968	4.575%	4.575%	$637.57	$979.15	$1,758.42
1983	$6,968	4.775%	4.775%	$665.44	$990.15	$1,693.49
1984	$6,968	4.926%	4.926%	$686.49	$979.19	$1,594.99
1985	$6,968	5.200%	5.200%	$724.67	$998.11	$1,548.39
1986	$6,968	5.200%	5.200%	$724.67	$979.89	$1,447.75
1987	$6,968	5.200%	5.200%	$724.67	$945.39	$1,330.26
1988	$6,968	5.530%	5.530%	$770.66	$965.44	$1,293.79
1989	$6,968	5.300%	5.300%	$738.61	$882.76	$1,126.64
1990	$7,670	5.600%	5.600%	$859.04	$974.06	$1,183.98
1991	$8,606	5.600%	5.600%	$963.87	$1,048.79	$1,214.11
1992	$8,840	5.600%	5.600%	$990.08	$1,045.83	$1,153.03
1993	$8,840	5.600%	5.600%	$990.08	$1,015.43	$1,066.20
1994	$8,840	5.260%	5.260%	$929.97	$929.97	$929.97
						$102,451.67

APPENDIX M. PRESENT VALUE OF BENEFITS RECEIVED FROM A MINIMUM WAGE EARNER RETIRING AT 65 IN 1994 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	MIN. WAGE EARNER	INDEXING FACTOR	INDEXED EARNINGS	5 LOWEST EARNINGS	EARNING YEARS USED +
1951	$1,560.00	7.1805648	$11,201.68		$11,201.68
1952	$1,560.00	6.7599686	$10,545.55		$10,545.55
1953	$1,560.00	6.4022723	$9,987.54		$9,987.54
1954	$1,560.00	6.3694052	$9,936.27		$9,936.27
1955	$1,560.00	6.088116	$9,497.46		$9,497.46
1956	$1,993.00	5.6901193	$11,340.41		$11,340.41
1957	$2,080.00	5.5192464	$11,480.03		$11,480.03
1958	$2,080.00	5.4710517	$11,379.79		$11,379.79
1959	$2,080.00	5.2128092	$10,842.64		$10,842.64
1960	$2,080.00	5.015959	$10,433.19		$10,433.19
1961	$2,184.00	4.9182114	$10,741.37		$10,741.37
1962	$2,392.00	4.6836813	$11,203.37		$11,203.37
1963	$2,461.00	4.5715705	$11,250.64		$11,250.64
1964	$2,600.00	4.392077	$11,419.40		$11,419.40
1965	$2,600.00	4.3143932	$11,217.42		$11,217.42
1966	$2,600.00	4.070086	$10,582.22		$10,582.22
1967	$2,886.00	3.8553335	$11,126.49		$11,126.49
1968	$3,293.00	3.6073964	$11,879.16		$11,879.16
1969	$3,328.00	3.4103102	$11,349.51		$11,349.51
1970	$3,328.00	3.2490737	$10,812.92		$10,812.92
1971	$3,328.00	3.0936282	$10,295.59		$10,295.59
1972	$3,328.00	2.8175096	$9,376.67		$9,376.67
1973	$3,328.00	2.6515997	$8,824.52		$8,824.52
1974	$3,883.00	2.5028204	$9,718.45		$9,718.45
1975	$4,368.00	2.3287841	$10,172.13		$10,172.13
1976	$4,784.00	2.1784635	$10,421.77		$10,421.77
1977	$4,784.00	2.0552863	$9,832.49		$9,832.49
1978	$5,512.00	1.9040823	$10,495.30		$10,495.30
1979	$6,032.00	1.7509142	$10,561.51		$10,561.51
1980	$6,448.00	1.6062344	$10,357.00		$10,357.00
1981	$6,968.00	1.4593337	$10,168.64		$10,168.64
1982	$6,968.00	1.3831862	$9,638.04		$9,638.04
1983	$6,968.00	1.3189338	$9,190.33		$9,190.33
1984	$6,968.00	1.2457057	$8,680.08		$8,680.08
1985	$6,968.00	1.1948008	$8,325.37		$8,325.37
1986	$6,968.00	1.1603601	$8,085.39	*	
1987	$6,968.00	1.0907952	$7,600.66	*	
1988	$6,968.00	1.0395938	$7,243.89	*	
1989	$6,968.00	1	$6,968.00	*	
1990	$7,670.00	1	$7,670.00	*	
1991	$8,606.00	1	$8,606.00		

+ = Used by Social Security to compute benefits

$364,284.98
/420
$867
- 370
$497
x .32
$159.15
+ 333
$492.15 1991 at age 62
x 1.037
$510.36
x 1.03
$525.67
x 1.026
$539.34 1994 at age 65
x 12
$6,472.06

PRESENT VALUES:

$84,111.60	2%
$72,660.85	4%
$67,782.38	**5%**
$63,379.74	6%
$59,397.37	7%

APPENDIX N. PRESENT VALUE OF TAXES PAID FOR A MAXIMUM WAGE EARNER RETIRING AT AGE 65 IN 1982 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	EARNINGS	OASI EMPLOYER TAX RATE	OASI EMPLOYEE TAX RATE	OASI (TAXES PAID)	CPI ADJUSTMENT	TAXES PAID IN PRESENT VALUE DOLLARS
1939	$3,000	1.000%	1.000%	$60.00	$415.78	$3,388.50
1940	$3,000	1.000%	1.000%	$60.00	$412.31	$3,200.21
1941	$3,000	1.000%	1.000%	$60.00	$392.65	$2,902.45
1942	$3,000	1.000%	1.000%	$60.00	$354.34	$2,494.56
1943	$3,000	1.000%	1.000%	$60.00	$333.75	$2,237.72
1944	$3,000	1.000%	1.000%	$60.00	$328.43	$2,097.15
1945	$3,000	1.000%	1.000%	$60.00	$321.17	$1,953.14
1946	$3,000	1.000%	1.000%	$60.00	$296.13	$1,715.15
1947	$3,000	1.000%	1.000%	$60.00	$258.61	$1,426.52
1948	$3,000	1.000%	1.000%	$60.00	$240.25	$1,262.11
1949	$3,000	1.000%	1.000%	$60.00	$242.61	$1,213.82
1950	$3,000	1.500%	1.500%	$90.00	$360.37	$1,717.16
1951	$3,600	1.500%	1.500%	$108.00	$400.85	$1,819.06
1952	$3,600	1.500%	1.500%	$108.00	$393.28	$1,699.75
1953	$3,600	1.500%	1.500%	$108.00	$390.34	$1,606.68
1954	$3,600	2.000%	2.000%	$144.00	$516.58	$2,025.06
1955	$4,200	2.000%	2.000%	$168.00	$604.93	$2,258.46
1956	$4,200	2.000%	2.000%	$168.00	$596.03	$2,119.29
1957	$4,200	2.000%	2.000%	$168.00	$576.94	$1,953.72
1958	$4,200	2.000%	2.000%	$168.00	$560.97	$1,809.18
1959	$4,800	2.250%	2.250%	$216.00	$716.29	$2,200.10
1960	$4,800	2.750%	2.750%	$264.00	$860.68	$2,517.70
1961	$4,800	2.750%	2.750%	$264.00	$852.04	$2,373.75
1962	$4,800	2.875%	2.875%	$276.00	$881.92	$2,340.00
1963	$4,800	3.375%	3.375%	$324.00	$1,021.76	$2,581.95
1964	$4,800	3.375%	3.375%	$324.00	$1,008.58	$2,427.27
1965	$4,800	3.375%	3.375%	$324.00	$992.57	$2,274.99
1966	$6,600	3.500%	3.500%	$462.00	$1,376.02	$3,003.68
1967	$6,600	3.550%	3.550%	$468.60	$1,353.89	$2,814.64
1968	$7,800	3.325%	3.325%	$518.70	$1,438.35	$2,847.83
1969	$7,800	3.725%	3.725%	$581.10	$1,527.96	$2,881.20
1970	$7,800	3.650%	3.650%	$569.40	$1,416.16	$2,543.22
1971	$7,800	4.050%	4.050%	$631.80	$1,505.40	$2,574.74
1972	$9,000	4.050%	4.050%	$729.00	$1,682.98	$2,741.39
1973	$10,800	4.300%	4.300%	$928.80	$2,018.68	$3,131.63
1974	$13,200	4.375%	4.375%	$1,155.00	$2,260.80	$3,340.23
1975	$14,100	4.375%	4.375%	$1,233.75	$2,212.95	$3,113.85
1976	$15,300	4.375%	4.375%	$1,338.75	$2,270.46	$3,042.64
1977	$16,500	4.375%	4.375%	$1,443.75	$2,299.04	$2,934.22
1978	$17,700	4.275%	4.275%	$1,513.35	$2,239.85	$2,722.55
1979	$22,900	4.330%	4.330%	$1,983.14	$2,635.99	$3,051.49
1980	$25,900	4.520%	4.520%	$2,341.36	$2,742.01	$3,023.06
1981	$29,700	4.700%	4.700%	$2,791.80	$2,963.79	$3,111.98
1982	$32,400	4.575%	4.575%	$2,964.60	$2,964.60	$2,964.60
						$107,458.41

APPENDIX O. PRESENT VALUE OF BENEFITS RECEIVED FROM A MAXIMUM WAGE EARNER RETIRING AT 65 IN 1982 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	MAX. WAGE EARNER	INDEXING FACTOR	INDEXED EARNINGS	5 LOWEST EARNINGS	EARNING YEARS USED +
1951	$3,600.00	3.4937053	$12,577.34		$12,577.34
1952	$3,600.00	3.2890641	$11,840.63		$11,840.63
1953	$3,600.00	3.1150269	$11,214.10		$11,214.10
1954	$3,600.00	3.0990354	$11,156.53	*	
1955	$4,200.00	2.9621741	$12,441.13		$12,441.13
1956	$4,200.00	2.7685287	$11,627.82		$11,627.82
1957	$4,200.00	2.6853904	$11,278.64		$11,278.64
1958	$4,200.00	2.6619413	$11,180.15		$11,180.15
1959	$4,800.00	2.5362934	$12,174.21		$12,174.21
1960	$4,800.00	2.4405159	$11,714.48		$11,714.48
1961	$4,800.00	2.3929568	$11,486.19		$11,486.19
1962	$4,800.00	2.2788461	$10,938.46	*	
1963	$4,800.00	2.2242986	$10,676.63	*	
1964	$4,800.00	2.1369659	$10,257.44	*	
1965	$4,800.00	2.0991689	$10,076.01	*	
1966	$6,600.00	1.9803012	$13,069.99		$13,069.99
1967	$6,600.00	1.8758133	$12,380.37		$12,380.37
1968	$7,800.00	1.7551797	$13,690.40		$13,690.40
1969	$7,800.00	1.6592871	$12,942.44		$12,942.44
1970	$7,800.00	1.5808375	$12,330.53		$12,330.53
1971	$7,800.00	1.5052054	$11,740.60		$11,740.60
1972	$9,000.00	1.3708599	$12,337.74		$12,337.74
1973	$10,800.00	1.2901364	$13,933.47		$13,933.47
1974	$13,200.00	1.2177478	$16,074.27		$16,074.27
1975	$14,100.00	1.1330704	$15,976.29		$15,976.29
1976	$15,300.00	1.0599318	$16,216.96		$16,216.96
1977	$16,500.00	1.0000000	$16,500.00		$16,500.00
1978	$17,700.00	1.0000000	$17,700.00		$17,700.00
1979	$22,900.00	1	$22,900.00		

+ = Used by Social Security to compute benefits

$302,427.75
/276
$1,096
-1085
$11
x .15
$1.61
+ 451.6
$453.21 1979 at age 62
x 1.099
$498.08
x 1.143
$569.31
x 1.112
$633.07 1982 at age 65
x 12
$7,596.83

PRESENT VALUES:

$94,805.32	2%
$82,376.02	4%
$77,047.65	**5%**
$72,220.42	6%
$67,837.81	7%

APPENDIX P. PRESENT VALUE OF TAXES PAID FOR A MAXIMUM WAGE EARNER RETIRING AT AGE 65 IN 1984 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	EARNINGS	OASI EMPLOYER TAX RATE	OASI EMPLOYEE TAX RATE	OASI (TAXES PAID)	CPI ADJUSTMENT	TAXES PAID IN PRESENT VALUE DOLLARS
1941	$3,000	1.000%	1.000%	$60.00	$381.51	$3,109.21
1942	$3,000	1.000%	1.000%	$60.00	$381.51	$2,961.15
1943	$3,000	1.000%	1.000%	$60.00	$359.34	$2,656.27
1944	$3,000	1.000%	1.000%	$60.00	$353.61	$2,489.41
1945	$3,000	1.000%	1.000%	$60.00	$345.79	$2,318.46
1946	$3,000	1.000%	1.000%	$60.00	$318.84	$2,035.96
1947	$3,000	1.000%	1.000%	$60.00	$278.45	$1,693.34
1948	$3,000	1.000%	1.000%	$60.00	$258.67	$1,498.18
1949	$3,000	1.000%	1.000%	$60.00	$261.21	$1,440.86
1950	$3,000	1.500%	1.500%	$90.00	$388.01	$2,038.34
1951	$3,600	1.500%	1.500%	$108.00	$431.58	$2,159.30
1952	$3,600	1.500%	1.500%	$108.00	$423.44	$2,017.67
1953	$3,600	1.500%	1.500%	$108.00	$420.27	$1,907.20
1954	$3,600	2.000%	2.000%	$144.00	$556.19	$2,403.84
1955	$4,200	2.000%	2.000%	$168.00	$651.31	$2,680.89
1956	$4,200	2.000%	2.000%	$168.00	$641.74	$2,515.69
1957	$4,200	2.000%	2.000%	$168.00	$621.18	$2,319.15
1958	$4,200	2.000%	2.000%	$168.00	$603.99	$2,147.58
1959	$4,800	2.250%	2.250%	$216.00	$771.22	$2,611.61
1960	$4,800	2.750%	2.750%	$264.00	$926.68	$2,988.62
1961	$4,800	2.750%	2.750%	$264.00	$917.38	$2,817.75
1962	$4,800	2.875%	2.875%	$276.00	$949.55	$2,777.68
1963	$4,800	3.375%	3.375%	$324.00	$1,100.12	$3,064.89
1964	$4,800	3.375%	3.375%	$324.00	$1,085.92	$2,881.28
1965	$4,800	3.375%	3.375%	$324.00	$1,068.69	$2,700.52
1966	$6,600	3.500%	3.500%	$462.00	$1,481.54	$3,565.50
1967	$6,600	3.550%	3.550%	$468.60	$1,457.71	$3,341.10
1968	$7,800	3.325%	3.325%	$518.70	$1,548.65	$3,380.50
1969	$7,800	3.725%	3.725%	$581.10	$1,645.13	$3,420.11
1970	$7,800	3.650%	3.650%	$569.40	$1,524.76	$3,018.92
1971	$7,800	4.050%	4.050%	$631.80	$1,620.84	$3,056.34
1972	$9,000	4.050%	4.050%	$729.00	$1,812.04	$3,254.16
1973	$10,800	4.300%	4.300%	$928.80	$2,173.48	$3,717.38
1974	$13,200	4.375%	4.375%	$1,155.00	$2,434.17	$3,965.00
1975	$14,100	4.375%	4.375%	$1,233.75	$2,382.65	$3,696.27
1976	$15,300	4.375%	4.375%	$1,338.75	$2,444.57	$3,611.75
1977	$16,500	4.375%	4.375%	$1,443.75	$2,475.34	$3,483.05
1978	$17,700	4.275%	4.275%	$1,513.35	$2,411.61	$3,231.79
1979	$22,900	4.330%	4.330%	$1,983.14	$2,838.13	$3,622.25
1980	$25,900	4.520%	4.520%	$2,341.36	$2,952.27	$3,588.51
1981	$29,700	4.700%	4.700%	$2,791.80	$3,191.07	$3,694.06
1982	$32,400	4.575%	4.575%	$2,964.60	$3,191.94	$3,519.11
1983	$35,700	4.775%	4.775%	$3,409.35	$3,556.54	$3,734.37
1984	$37,800	4.926%	4.926%	$3,724.06	$3,724.06	$3,724.06
						$126,859.06

APPENDIX Q. PRESENT VALUE OF BENEFITS RECEIVED FROM A MAXIMUM WAGE EARNER RETIRING AT 65 IN 1984 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	MAX. WAGE EARNER	INDEXING FACTOR	INDEXED EARNINGS	5 LOWEST EARNIINGS	EARNING YEARS USED +
1951	$3,600.00	4.1010375	$14,763.74		$14,763.74
1952	$3,600.00	3.8608222	$13,898.96		$13,898.96
1953	$3,600.00	3.656311	$13,162.72		$13,162.72
1954	$3,600.00	3.6377597	$13,095.93	*	
1955	$4,200.00	3.477107	$14,603.85		$14,603.85
1956	$4,200.00	3.249799	$13,649.16		$13,649.16
1957	$4,200.00	3.1522083	$13,239.27		$13,239.27
1958	$4,200.00	3.1246829	$13,123.67		$13,123.67
1959	$4,800.00	2.9771928	$14,290.53		$14,290.53
1960	$4,800.00	2.8647657	$13,750.88		$13,750.88
1961	$4,800.00	2.8089391	$13,482.91		$13,482.91
1962	$4,800.00	2.6749918	$12,839.96	*	
1963	$4,800.00	2.610962	$12,532.62	*	
1964	$4,800.00	2.5084478	$12,040.55	*	
1965	$4,800.00	2.4640803	$11,827.59	*	
1966	$6,600.00	2.324549	$15,342.02		$15,342.02
1967	$6,600.00	2.2018974	$14,532.52		$14,532.52
1968	$7,800.00	2.0602933	$16,070.29		$16,070.29
1969	$7,800.00	1.9477312	$15,192.30		$15,192.30
1970	$7,800.00	1.8556441	$14,474.02		$14,474.02
1971	$7,800.00	1.7668645	$13,781.54		$13,781.54
1972	$9,000.00	1.6091648	$14,482.48		$14,482.48
1973	$10,800.00	1.5144087	$16,355.61		$16,355.61
1974	$13,200.00	1.4294363	$18,868.56		$18,868.56
1975	$14,100.00	1.330039	$18,753.55		$18,753.55
1976	$15,300.00	1.2441863	$19,036.05		$19,036.05
1977	$16,500.00	1.1738361	$19,368.30		$19,368.30
1978	$17,700.00	1.0874789	$19,248.38		$19,248.38
1979	$22,900.00	1	$22,900.00		$22,900.00
1980	$25,900.00	1	$25,900.00		$25,900.00
1981	$29,700.00	1	$29,700.00		

+ = Used by Social Security to compute benefits

$402,271.30
/300
$1,341
-1274
$67
x.15
$10.04
+ 530.06
$540.10 1981 at age 62
x 1.112
$600.59
x 1.074
$645.03
x 1.0353
$667.61 1984 at age 65
x 12
$8,011.27

PRESENT VALUES:

$99,381.57	2%
$86,424.34	4%
$80,864.70	**5%**
$75,825.17	6%
$71,247.39	7%

APPENDIX R. PRESENT VALUE OF TAXES PAID FOR A MAXIMUM WAGE EARNER RETIRING AT AGE 65 IN 1992 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	EARNINGS	OASI EMPLOYER TAX RATE	OASI EMPLOYEE TAX RATE	OASI (TAXED PAID)	CPI ADJUSTMENT	TAXES PAID - PRESENT VALUE DOLLARS
1949	$3,000	1.000%	1.000%	$60.00	$352.73	$2,874.60
1950	$3,000	1.500%	1.500%	$90.00	$523.94	$4,066.62
1951	$3,600	1.500%	1.500%	$108.00	$582.78	$4,307.94
1952	$3,600	1.500%	1.500%	$108.00	$571.79	$4,025.39
1953	$3,600	1.500%	1.500%	$108.00	$567.51	$3,804.98
1954	$3,600	2.000%	2.000%	$144.00	$751.05	$4,795.80
1955	$4,200	2.000%	2.000%	$168.00	$879.49	$5,348.55
1956	$4,200	2.000%	2.000%	$168.00	$866.56	$5,018.95
1957	$4,200	2.000%	2.000%	$168.00	$838.80	$4,626.86
1958	$4,200	2.000%	2.000%	$168.00	$815.58	$4,284.55
1959	$4,800	2.250%	2.250%	$216.00	$1,041.40	$5,210.33
1960	$4,800	2.750%	2.750%	$264.00	$1,251.32	$5,962.49
1961	$4,800	2.750%	2.750%	$264.00	$1,238.77	$5,621.58
1962	$4,800	2.875%	2.875%	$276.00	$1,282.21	$5,541.65
1963	$4,800	3.375%	3.375%	$324.00	$1,485.53	$6,114.64
1964	$4,800	3.375%	3.375%	$324.00	$1,466.36	$5,748.33
1965	$4,800	3.375%	3.375%	$324.00	$1,443.09	$5,387.70
1966	$6,600	3.500%	3.500%	$462.00	$2,000.57	$7,113.39
1967	$6,600	3.550%	3.550%	$468.60	$1,968.40	$6,665.70
1968	$7,800	3.325%	3.325%	$518.70	$2,091.20	$6,744.32
1969	$7,800	3.725%	3.725%	$581.10	$2,221.48	$6,823.33
1970	$7,800	3.650%	3.650%	$569.40	$2,058.94	$6,022.93
1971	$7,800	4.050%	4.050%	$631.80	$2,188.68	$6,097.58
1972	$9,000	4.050%	4.050%	$729.00	$2,446.86	$6,492.24
1973	$10,800	4.300%	4.300%	$928.80	$2,934.92	$7,416.41
1974	$13,200	4.375%	4.375%	$1,155.00	$3,286.95	$7,910.43
1975	$14,100	4.375%	4.375%	$1,233.75	$3,217.38	$7,374.30
1976	$15,300	4.375%	4.375%	$1,338.75	$3,301.00	$7,205.66
1977	$16,500	4.375%	4.375%	$1,443.75	$3,342.54	$6,948.91
1978	$17,700	4.275%	4.275%	$1,513.35	$3,256.49	$6,447.62
1979	$22,900	4.330%	4.330%	$1,983.14	$3,832.43	$7,226.62
1980	$25,900	4.520%	4.520%	$2,341.36	$3,986.56	$7,159.29
1981	$29,700	4.700%	4.700%	$2,791.80	$4,309.02	$7,369.88
1982	$32,400	4.575%	4.575%	$2,964.60	$4,310.19	$7,020.85
1983	$35,700	4.775%	4.775%	$3,409.35	$4,802.53	$7,450.30
1984	$37,800	4.926%	4.926%	$3,724.06	$5,028.73	$7,429.72
1985	$39,600	5.200%	5.200%	$4,118.40	$5,370.00	$7,556.12
1986	$42,000	5.200%	5.200%	$4,368.00	$5,591.52	$7,493.17
1987	$43,800	5.200%	5.200%	$4,555.20	$5,625.83	$7,180.15
1988	$45,000	5.530%	5.530%	$4,977.00	$5,902.56	$7,174.60
1989	$48,000	5.300%	5.300%	$5,088.00	$5,756.83	$6,664.25
1990	$51,300	5.600%	5.600%	$5,745.60	$6,167.62	$6,799.80
1991	$53,400	5.600%	5.600%	$5,980.80	$6,160.84	$6,468.88
1992	$55,500	5.600%	5.600%	$6,216.00	$6,216.00	$6,216.00
						$271,213.39

APPENDIX S. PRESENT VALUE OF BENEFITS RECEIVED FROM A MAXIMUM WAGE EARNER RETIRING AT 65 IN 1992 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	MAX. WAGE EARNER	INDEXING FACTOR	INDEXED EARNINGS	5 LOWEST EARNINGS	EARNING YEARS USED +
1951	$3,600.00	6.5828712	$23,698.34		$23,698.34
1952	$3,600.00	6.1972845	$22,310.22		$22,310.22
1953	$3,600.00	5.869362	$21,129.70		$21,129.70
1954	$3,600.00	5.8392307	$21,021.23	*	
1955	$4,200.00	5.5813554	$23,441.69		$23,441.69
1956	$4,200.00	5.2164869	$21,909.24		$21,909.24
1957	$4,200.00	5.0598371	$21,251.32		$21,251.32
1958	$4,200.00	5.015654	$21,065.75		$21,065.75
1959	$4,800.00	4.7789071	$22,938.75		$22,938.75
1960	$4,800.00	4.5984422	$22,072.52		$22,072.52
1961	$4,800.00	4.5088309	$21,642.39		$21,642.39
1962	$4,800.00	4.2938225	$20,610.35	*	
1963	$4,800.00	4.1910436	$20,117.01	*	
1964	$4,800.00	4.0264907	$19,327.16	*	
1965	$4,800.00	3.9552731	$18,985.31	*	
1966	$6,600.00	3.7313014	$24,626.59		$24,626.59
1967	$6,600.00	3.5344244	$23,327.20		$23,327.20
1968	$7,800.00	3.3071255	$25,795.58		$25,795.58
1969	$7,800.00	3.1264438	$24,386.26		$24,386.26
1970	$7,800.00	2.9786283	$23,233.30		$23,233.30
1971	$7,800.00	2.8361217	$22,121.75		$22,121.75
1972	$9,000.00	2.5829866	$23,246.88		$23,246.88
1973	$10,800.00	2.4308866	$26,253.58		$26,253.58
1974	$13,200.00	2.2944914	$30,287.29		$30,287.29
1975	$14,100.00	2.1349415	$30,102.68		$30,102.68
1976	$15,300.00	1.9971332	$30,556.14		$30,556.14
1977	$16,500.00	1.8842091	$31,089.45		$31,089.45
1978	$17,700.00	1.7455909	$30,896.96		$30,896.96
1979	$22,900.00	1.6051721	$36,758.44		$36,758.44
1980	$25,900.00	1.4725351	$38,138.66		$38,138.66
1981	$29,700.00	1.3378622	$39,734.51		$39,734.51
1982	$32,400.00	1.268053	$41,084.92		$41,084.92
1983	$35,700.00	1.2091488	$43,166.61		$43,166.61
1984	$37,800.00	1.1420161	$43,168.21		$43,168.21
1985	$39,600.00	1.0953484	$43,375.80		$43,375.80
1986	$42,000.00	1.0637744	$44,678.52		$44,678.52
1987	$43,800.00	1	$43,800.00		$43,800.00
1988	$45,000.00	1	$45,000.00		$45,000.00
1989	$48,000.00	1	$48,000.00		

+ = Used by Social Security to compute benefits

$962,590.90
/396
$2,431
- 2044
$387
x .15
$58.02
+ 850.7
$908.72 1989 at age 62
x 1.047
$951.43
x 1.054
$1,002.80
x 1.037
$1,039.91 1992 at age 65
x 12
$12,478.90

PRESENT VALUES:

$160,344.68	2%
$138,745.25	4%
$129,526.72	**5%**
$121,198.19	6%
$113,656.75	7%

APPENDIX T. PRESENT VALUE OF TAXES PAID FOR A MAXIMUM WAGE EARNER RETIRING AT AGE 65 IN 1994 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR	EARNINGS	OASI EMPLOYER TAX RATE	OASI EMPLOYEE TAX RATE	OASI (TAXES PAID)	CPI ADJUSTMENT	TAXES PAID IN PRESENT VALUE DOLLARS
1951	$3,600	1.500%	1.500%	$108.00	$615.60	$5,016.93
1952	$3,600	1.500%	1.500%	$108.00	$603.98	$4,687.88
1953	$3,600	1.500%	1.500%	$108.00	$599.46	$4,431.21
1954	$3,600	2.000%	2.000%	$144.00	$793.34	$5,585.09
1955	$4,200	2.000%	2.000%	$168.00	$929.01	$6,228.81
1956	$4,200	2.000%	2.000%	$168.00	$915.35	$5,844.97
1957	$4,200	2.000%	2.000%	$168.00	$886.04	$5,388.34
1958	$4,200	2.000%	2.000%	$168.00	$861.51	$4,989.70
1959	$4,800	2.250%	2.250%	$216.00	$1,100.04	$6,067.84
1960	$4,800	2.750%	2.750%	$264.00	$1,321.78	$6,943.79
1961	$4,800	2.750%	2.750%	$264.00	$1,308.52	$6,546.78
1962	$4,800	2.875%	2.875%	$276.00	$1,354.41	$6,453.69
1963	$4,800	3.375%	3.375%	$324.00	$1,569.18	$7,120.98
1964	$4,800	3.375%	3.375%	$324.00	$1,548.93	$6,694.38
1965	$4,800	3.375%	3.375%	$324.00	$1,524.34	$6,274.40
1966	$6,600	3.500%	3.500%	$462.00	$2,113.22	$8,284.10
1967	$6,600	3.550%	3.550%	$468.60	$2,079.24	$7,762.74
1968	$7,800	3.325%	3.325%	$518.70	$2,208.95	$7,854.29
1969	$7,800	3.725%	3.725%	$581.10	$2,346.57	$7,946.31
1970	$7,800	3.650%	3.650%	$569.40	$2,174.87	$7,014.18
1971	$7,800	4.050%	4.050%	$631.80	$2,311.92	$7,101.12
1972	$9,000	4.050%	4.050%	$729.00	$2,584.64	$7,560.74
1973	$10,800	4.300%	4.300%	$928.80	$3,100.18	$8,637.00
1974	$13,200	4.375%	4.375%	$1,155.00	$3,472.03	$9,212.32
1975	$14,100	4.375%	4.375%	$1,233.75	$3,398.55	$8,587.96
1976	$15,300	4.375%	4.375%	$1,338.75	$3,486.87	$8,391.56
1977	$16,500	4.375%	4.375%	$1,443.75	$3,530.75	$8,092.56
1978	$17,700	4.275%	4.275%	$1,513.35	$3,439.85	$7,508.77
1979	$22,900	4.330%	4.330%	$1,983.14	$4,048.23	$8,415.98
1980	$25,900	4.520%	4.520%	$2,341.36	$4,211.04	$8,337.57
1981	$29,700	4.700%	4.700%	$2,791.80	$4,551.65	$8,582.81
1982	$32,400	4.575%	4.575%	$2,964.60	$4,552.89	$8,176.33
1983	$35,700	4.775%	4.775%	$3,409.35	$5,072.95	$8,676.46
1984	$37,800	4.926%	4.926%	$3,724.06	$5,311.89	$8,652.50
1985	$39,600	5.200%	5.200%	$4,118.40	$5,672.37	$8,799.71
1986	$42,000	5.200%	5.200%	$4,368.00	$5,906.36	$8,726.39
1987	$43,800	5.200%	5.200%	$4,555.20	$5,942.61	$8,361.85
1988	$45,000	5.530%	5.530%	$4,977.00	$6,234.92	$8,355.39
1989	$48,000	5.300%	5.300%	$5,088.00	$6,080.98	$7,761.04
1990	$51,300	5.600%	5.600%	$5,745.60	$6,514.90	$7,918.91
1991	$53,400	5.600%	5.600%	$5,980.80	$6,507.74	$7,533.53
1992	$55,500	5.600%	5.600%	$6,216.00	$6,566.01	$7,239.03
1993	$57,600	5.600%	5.600%	$6,451.20	$6,616.39	$6,947.21
1994	$60,600.00	5.260%	5.260%	$6,375.12	$6,375.12	$6,375.12
						$321,088.28

APPENDIX U. PRESENT VALUE OF BENEFITS RECEIVED FROM A MAXIMUM WAGE EARNER RETIRING AT 65 IN 1994 (ASSUMING A 5 PERCENT REAL INTEREST RATE)

YEAR		MAX. WAGE EARNER		INDEXING FACTOR		INDEXED EARNINGS	5 LOWEST EARNINGS	EARNING YEARS USED +
1951		$3,600.00		7.1805648		$25,850.03		$25,850.03
1952		$3,600.00		6.7599686		$24,335.89		$24,335.89
1953		$3,600.00		6.4022723		$23,048.18		$23,048.18
1954		$3,600.00		6.3694052		$22,929.86	*	
1955		$4,200.00		6.088116		$25,570.09		$25,570.09
1956		$4,200.00		5.6901193		$23,898.50		$23,898.50
1957		$4,200.00		5.5192464		$23,180.83		$23,180.83
1958		$4,200.00		5.4710517		$22,978.42		$22,978.42
1959		$4,800.00		5.2128092		$25,021.48		$25,021.48
1960		$4,800.00		5.015959		$24,076.60		$24,076.60
1961		$4,800.00		4.9182114		$23,607.41		$23,607.41
1962		$4,800.00		4.6836813		$22,481.67	*	
1963		$4,800.00		4.5715705		$21,943.54	*	
1964		$4,800.00		4.392077		$21,081.97	*	
1965		$4,800.00		4.3143932		$20,709.09	*	
1966		$6,600.00		4.070086		$26,862.57		$26,862.57
1967		$6,600.00		3.8553335		$25,445.20		$25,445.20
1968		$7,800.00		3.6073964		$28,137.69		$28,137.69
1969		$7,800.00		3.4103102		$26,600.42		$26,600.42
1970		$7,800.00		3.2490737		$25,342.77		$25,342.77
1971		$7,800.00		3.0936282		$24,130.30		$24,130.30
1972		$9,000.00		2.8175096		$25,357.59		$25,357.59
1973		$10,800.00		2.6515997		$28,637.28		$28,637.28
1974		$13,200.00		2.5028204		$33,037.23		$33,037.23
1975		$14,100.00		2.3287841		$32,835.86		$32,835.86
1976		$15,300.00		2.1784635		$33,330.49		$33,330.49
1977		$16,500.00		2.0552863		$33,912.22		$33,912.22
1978		$17,700.00		1.9040823		$33,702.26		$33,702.26
1979		$22,900.00		1.7509142		$40,095.94		$40,095.94
1980		$25,900.00		1.6062344		$41,601.47		$41,601.47
1981		$29,700.00		1.4593337		$43,342.21		$43,342.21
1982		$32,400.00		1.3831862		$44,815.23		$44,815.23
1983		$35,700.00		1.3189338		$47,085.94		$47,085.94
1984		$37,800.00		1.2457057		$47,087.68		$47,087.68
1985		$39,600.00		1.1948008		$47,314.11		$47,314.11
1986		$42,000.00		1.1603601		$48,735.12		$48,735.12
1987		$43,800.00		1.0907952		$47,776.83		$47,776.83
1988		$45,000.00		1.0395938		$46,781.72		$46,781.72
1989		$48,000.00		1		$48,000.00		$48,000.00
1990		$51,300.00		1		$51,300.00		$51,300.00
1991		$53,400.00		1		$53,400.00		

+ = Used by Social Security to compute benefits

$1,172,835.57
/420
$2,792
- 2230
$562
x .15
$84.37
+ 928.2
$1,012.57 1991 at age 62
x 1.037
$1,050.03
x 1.03
$1,081.54
x 1.026
$1,109.66 1994 at age 65
x 12
$13,315.87

PRESENT VALUES:

$173,054.51	2%
$149,495.30	4%
$139,458.14	**5%**
$130,399.98	6%
$122,206.49	7%

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